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THE

Henry C. Taylor.

RURAL ECONOMY

OF

YORKSHIRE.

VOL. II.

THE

RURAL ECONOMY

Henry C. Taylor.

OF

YORKSHIRE.

COMPRIZING THE

Management of Landed Eſtates,

AND THE

PRESENT PRACTICE of HUSBANDRY

IN THE

AGRICULTURAL DISTRICTS

OF THAT COUNTY.

By Mr. MARSHALL.

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THE RURAL ECONOMY OF YORKSHIRE.

15.

WHEAT.

Introductory Remarks.

IN NORFOLK, a CORN country, whoſe huſbandry may be taken as a ſtandard for other LIGHT-LAND DISTRICTS, I ſtudied the various proceſſes, of each ARABLE CROP, with attention; and have endeavored to deſcribe them with minuteneſs. But to purſue a ſimilar conduct, in a country where GRASS LAND prevails; where corn is, of courſe, only a *ſecondary* object; and where, through the diverſity of ſoils, and the preſent

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ſtate of incloſure, no regular management of arable crops, ſufficiently excellent to be held out as a pattern, is eſtabliſhed,—would be an impropriety. Nevertheleſs, in a country where improvement ſtands on tiptoe, eager to diſcover and bring into practice every thing which wears the aſpect of ſuperior utility, it would be ſtill more improper to paſs over the INDIVIDUALS of the ARABLE CROPS, without notice.

Their GENERAL MANAGEMENT has been already deſcribed, under the foregoing general heads. What remains to be done with reſpect to EACH CROP is, to regiſter ſuch PARTICULARS, as I judge may be of ſervice, in the advancement of the plan under execution.

The particulars which ſtrike me as being noticeable, under the preſent head, are,

I. The ſpecies of wheat;
II. The raiſing of new varieties;
III. Preparing the ſeed;
IV. An opinion reſpecting mildew.

I. THE SPECIES of Wheat, cultivated at preſent in the Diſtrict, are,

1. TRITICUM *Hybernum*; WINTER WHEAT: of which there are the following VARIETIES:

1. "*Zealand*

1. "*Zealand Wheat:*" chaff white, without awns *; ears ſomewhat large; grain white and full-bodied; ſtraw long and reedy. This ſort is well adapted to weak and to middling ſoiled land. In a rich ſoil, eſpecially in a moiſt ſeaſon, it runs too much to ſtraw.

2. "*Downy Kent:*" chaff white, downy, and awnleſs; ears of the middle ſize; grain white and ſmall; ſtraw ſhort. This kind is beſt adapted to good land; in which it generally yields abundantly, notwithſtanding the ſmallneſs of the grains.

3. *Common White Wheat.* The two preceding ſorts ſeem to have almoſt baniſhed the "old white wheat" of the Diſtrict—the *white Lammas* of other diſtricts.

4. *Hertfordſhire Brown.* Chaff *white*,—grain *red*,—ſtraw of a middle growth: reſembling the *Kentiſh white Coſh* of Norfolk.

5. "*Yellow Kent.*" Chaff ſomewhat *red*; grain *white!* ears large; ſtraw ſtout.

6. *Common Red Wheat.* This, like the old white, appears to be now nearly extinct.

* All the varieties of *Triticum Hybernum*, which I have yet obſerved, have *a few ſhort awns*, towards the top of the ear.

2. TRITICUM *Æſtivum*; SUMMER WHEAT;—generally known by the name of SPRING WHEAT.

In the Whitby quarter of the *Morelands*, this ſpecies of wheat has been cultivated many years. It was introduced into the *Vale*, a few years ago; but it does not ſeem to gain an eſtabliſhment here. It has, however, been ſufficiently tried to aſcertain *the proper month of ſowing:* namely, *April*.

II. RAISING VARIETIES. It is probable, that time has the ſame effect upon the varieties of wheat, and other grains, as it has on thoſe of cultivated fruits, potatoes, and other vegetable productions.

In every country, I find new varieties of corn gaining footing, and old ones giving place to them. Faſhion may influence a few individuals to *introduce* a new variety; but it is not likely that faſhion, alone, ſhould induce a body of profeſſional huſbandmen to *diſcard* an old one.

In GARDENING, varieties are endleſs; and freſh ones are annually making: not perhaps ſo much by accident, as by induſtry. Thus to produce an early PEA, the gardener marks the plants which open firſt into bloſſom, among the moſt early kind he has in cul-

cultivation. Next year, he ſows the produce of theſe plants, and goes over the coming crop, in the manner he had done the preceding year, marking the earlieſt of this earlier kind. In a ſimilar manner, new varieties of APPLES are raiſed, by chooſing the broadeſt-leaved plants, among a bed of ſeedlings, riſing promiſcuouſly from pippins.

HUSBANDMEN, it is probable, have heretofore been equally induſtrious in producing freſh varieties of CORN; or whence the endleſs variety of WINTER WHEATS? If they be naturally of one and the ſame ſpecies, as Linneus has deemed them, they muſt have been produced by climature, ſoil, or induſtry; for although nature ſometimes ſports with individuals, the induſtry of man is requiſite to raiſe, eſtabliſh, and continue, a PERMANENT VARIETY.

Of late, the raiſing of varieties has perhaps been little attended to. Transferring thoſe already eſtabliſhed, from one part of the kingdom, or from one part of the world, to another, has alone, perhaps, produced the recent changes in the ſeveral Diſtricts. The only inſtance in which I have had an opportunity of tracing the *variety* down to the

parent individual, has occurred to me in this Diſtrict.

A man, whoſe obſervation is ever on the wing in the field of huſbandry, having perceived, in a piece of wheat, a plant of uncommon ſtrength and luxuriance, diffuſing its branches on every ſide, and ſetting its cloſely ſurrounding neighbours at defiance; marked it, and at harveſt removed it ſeparately.

The produce was fifteen ears, yielding ſix hundred and four grains, of a ſtrong-bodied liver-colored wheat, different in general appearance from every other variety I have ſeen. The chaff ſmooth, awnleſs, and the color of the grain. The ſtraw ſtout and reedy.

Theſe ſix hundred grains were planted, ſingly, nine inches aſunder, filling about forty ſquare yards of ground; not in a garden, or in a ſeparate piece of ground, but upon a clover ſtubble; the remainder of which was, at the ſame time, ſown with other wheat, in the common way: by which means *extraordinary trouble* and *deſtruction by birds* were equally avoided.

The produce of theſe forty yards was two gallons and a half, weighing twenty pounds and

and a half, of prime grain, fit for ſeed; beſides ſome pounds of ſeconds. One grain produced thirtyfive ears, yielding twelve hundred and thirtyfive grains.

The ſecond year's produce being ſufficient to plant an acre of ground, the variety was of courſe ſufficiently eſtabliſhed.

This, the fifth year, I have ſeen it grow in quantity; but the ſeaſon being moiſt, and the ſoil good, it was moſt of it lodged. The crop upon the ground is abundant; ſeventy full ſhocks an acre. But the produce of Zealand wheat, in the ſame piece, is equal to it; and, on examination, I think the grain of this is better, its ſkin is ſomewhat thinner. Nevertheleſs, the variety under notice may rank with the firſt of the preſent day. For an inferior ſoil, it may perhaps be found highly eligible.

It is obſervable, that the quality of this variety *improves*. Its color and ſkin, this year, notwithſtanding the unfavorableneſs of the ſeaſon, are finer than they were the laſt and the preceding years.

General Remarks on raising and improving Varieties of Grain.

Its intrinsic value, however, would not have been a sufficient inducement for describing the circumstances of its rise, had not these circumstances pointed out, at the same time, the *practicability*, as well as an *easy and speedy method*, *of raising new varieties*, and of *improving* those that are already known.

What deters *Farmers* from improvements of this nature, is principally the mischievousness of BIRDS; from which, at harvest, it is scarcely possible to preserve a small patch of corn, especially in a *garden*, or other ground, situated near a *habitation*. But, by carrying on the improvement, in a *field of corn*, *of the same nature*, that inconveniency is got rid of.

In this situation, however, the *botanist* will be apprehensive of danger, from the floral farina of the surrounding crop. But, from what observation I have made, I am of opinion his fears will prove groundless. No evil effect of this nature occurred, in the instance above recited, although the cultivation has been carried on among *white* wheat. But this need not be brought as an evidence: it

is

is not uncommon, here, to ſow a mixture of *red* and *white* wheats together, and this, it is confidently aſſerted, without impairing even the *color* of either of them.

The ſame mode of culture is applicable to the IMPROVEMENT OF VARIETIES; which perhaps, would be more profitable to the huſbandman, than raiſing new ones, and much more expeditious.

Formerly, it was the practice, in the improvement of cattle, to *croſs* with other breeds; but modern breeders, who have brought the art to a high degree of perfection, purſue a different method: they pick out the faireſt, of the particular breed or variety they want to improve, and proſecute the improvement with theſe *ſelected individuals*.

In every field of corn, let the variety be ever ſo pure, and ever ſo well adapted to the ſoil and ſituation, the ſame inequality, in the beauty and goodneſs of individuals, is obſervable, as in a herd of cattle; and it is the buſineſs of the corn farmer to avail himſelf of ſo ſuitable an opportunity of improvement, *by ſelecting ſuch individual plants as excel in vigor and productiveneſs*, under a moral certainty that ſuch individuals are peculiarly adapted to *this* ſoil and ſituation.

III. PRE-

III. PREPARING SEED WHEAT. In the Rural Economy of NORFOLK, I have mentioned an improvement in the uſe of ſalt and lime, as preventives againſt ſmut. Here, a ſingular remedy is made uſe of, for that purpoſe; ſingular I mean as to this Diſtrict, in which, alone, I have found ARSENIC uſed, as a preventive of that troubleſome diſeaſe.

Formerly, brine and lime were the uſual preparation, here, as they ſtill are in almoſt every Diſtrict of the Iſland. How long arſenic has been in uſe, or how the uſe of it was introduced, I have not learnt with ſufficient accuracy. One perſon (whoſe accuracy might be ſafely relied on, were not his evidence corroborated by my own occaſional obſervation) has uſed it more than twenty years, invariably, and with uniform ſucceſs. He cannot ſay that, during that time, he has not had a ſmutty ear of wheat upon his farm; but he aſſerts, with confidence, that ſince he prepared ſeed wheat with arſenic water, he has not experienced a ſenſible injury from ſmut. The ſame or a ſimilar ſtrength of evidence might be obtained, probably, from an hundred individuals in this neighbourhood.

Its

Its EFFICACY, I believe, is not doubted, by any one who has given it a fair trial; but there are ſome who, through apprehenſions of *danger* from the careleſſneſs of ſervants, or from their own abſentneſs, or under an idea that an arſenical preparation is hurtful to the ſeedſman, are ſcrupulous about uſing it.

Whether the *laſt* has, or has not, any foundation in truth is, at preſent, a matter in diſpute. The perſon abovementioned has not, during his twenty years practice, experienced any inconveniency, either to himſelf, his ſervants, or his live ſtock; not even to his poultry. Nor have I heard of a ſingle accident having ariſen, from the uſe of it, in any part of the Diſtrict.

I do not mean to comment upon this practice: ſuffice it for me to regiſter ſuch facts as have occurred to me reſpecting it, and to give the proceſs; leaving the reader to form his own judgment, in regard to the propriety of uſing it.

This preparation is made by pounding the arſenic, extremely fine, boiling it in water, diluting the decoction, and drenching the ſeed effectually in the liquor.

In ſtrictneſs, the arſenic ſhould be levigated, ſufficiently fine to be taken up and

waſhed

waſhed over with water, reducing the ſediment, until it be fine enough to be carried over in the ſame manner.

The uſual method of preparing the liquor is to boil one ounce of *white* arſenic, finely powdered, in a gallon of water, from one to two hours, and to add to the decoction as much water, or ſtale urine, as will increaſe the quantity of liquor to two gallons.

In this liquor, the ſeed is, or ought to be, *immerged*, ſtirring it about, in ſuch manner, as to *ſaturate*, completely, the *downy end* of each grain.

This done, and the liquor drawn off, the ſeed is conſidered as fit for the ſeed baſket, without being candied with lime, or any other preparation.

If, however, any danger ariſe to the ſeedſman, from ſowing ſeed thus prepared, (which I believe is merely ideal) it probably ariſes from the ſuperfluous moiſture of the ſeed, in this ſtate, entering the pores of his hand. Candying the ſeed, with lime, would not only abſorb the redundant liquor, but would render the ſeed more pleaſant to the hand in ſowing, and more diſtinguiſhable by the eye, when caſt upon the ground.

A buſhel

A bushel of wheat has been observed to take up about a gallon of liquor. The price of arsenic is about sixpence a pound; which, on this calculation, will cure four quarters of seed. If no more than three quarters be prepared with it, the cost will be only a farthing a bushel; but to this must be added the labor of pounding and boiling. Nevertheless, it is by much the cheapest preparation we are at present acquainted with.

IV. THE MILDEW OF WHEAT. It is a received idea, in this District, that MESLIN,—provincially, "masshelson,"—(a mixture of wheat and rye, formerly a very common crop in this neighbourhood, and still remains to be so in the Morelands) is never affected by the blight, or "mildew:"—and that the nature of *rye* is such, that a very small quantity of it, sown among *wheat*, prevents this frequently destructive effect.

This, *if well founded*, is a most interesting fact; not only in HUSBANDRY, but in the VEGETABLE ECONOMY. I register it, merely, as a popular opinion, among professional men.

16.

RYE.

THE ONLY SPECIES of rye, cultivated in theſe kingdoms, is the SECALE *cereale* of Linneus; of which two varieties are cultivated in this Diſtrict.

1. BLACK RYE; formerly the only ſort.

2. WHITE RYE, or DANTZIC RYE; introduced into this country, about half a century ago, and is now the almoſt only kind which is cultivated.

Before the uſe of LIME was prevalent, much rye was grown on the lighter lands, upon the margin of the Vale; and, in the Morelands, ſcarcely any other crops, than rye and oats, were attempted. Now, rye is principally confined to the Moreland dales; and, even there, the *alteration of ſoils by lime* has been ſuch, that wheat is become the more prevalent crop.

Nevertheleſs, on light ſandy Moreland ſoils, rye is generally more profitable than wheat; and the bread which is made from a

mixture

mixture of the two grains, is here eſteemed more wholeſome, to perſons in general, than that which is made from wheat alone.

17.

BARLEY.

THERE ARE FOUR SPECIES of barley, cultivated, more or leſs, in this Diſtrict.

Common barley, — *hordeum diſtichon*, — long-eared barley.

Battledoor barley,—*hordeum zeocrithon*,— ſprat barley.

Big,—*hordeum vulgare*,—four-rowed barley, or ſpring barley.

hordeum hexaſtichon,—ſix-rowed barley, or winter barley.

The firſt and the third are the ſorts which are, now, principally cultivated: the firſt, in the Vale; the third, in the Morelands; or, in the Vale, when the ſeaſon of ſowing is driven very late. Formerly, "BATTLE-DOOR BARLEY" was a common crop; but at preſent it is almoſt out of cultivation. The WINTER BARLEY is new to the Diſtrict;

and

and it does not ſeem to be yet generally underſtood,—that it ought to be *ſown in autumn*.

In the open field ſtate, barley was grown in the "wheat field," alternately with wheat.

One circumſtance, reſpecting the ANCIENT HUSBANDRY of this crop, deſerves to be regiſtered; as it ſerves to ſhew the alteration which time has the power of making, even in the buſineſs of huſbandmen.

Leſs than a century ago, I believe, barley was not ſaleable, until it was MALTED. Public malt-houſes, and the buſineſs of a maltſter, were equally unknown: *every farmer malted his own barley*, or ſold it to a neighbor who had a MALT KILN; an out-office neceſſary, in thoſe days, to every conſiderable farm.

The fuel, uſed on this occaſion, was chiefly brakes, cut off the neighbouring commons: a certain day of cutting being fixt, to prevent any man from monopolizing more than his ſhare.

When malted, it was ſaleable; and the ſurplus of the conſumption of the neighbourhood found a market at Whitby, Scarborough, and other towns of the Diſtrict.

Now,

Now, even *public malt houſes* are unknown; the entire buſineſs of malting being in the hands of profeſſional MALTSTERS; who buy the barley of the farmer, and ſell him the malt which he may want for his own private uſe; as in moſt other Diſtricts.

18.

OATS.

LINNEUS includes the whole tribe of cultivated oats in the ſpecies AVENA *ſativa*.

The VARIETIES formerly cultivated, in this Diſtrict, were the "SLOW OAT" and the "HASTY OAT;" both of them conſidered as of Scotch extraction.

At preſent the ſorts principally in uſe are,

1. "POLAND OAT:" a ſhort, plump grain; but the thickneſs of its ſkin ſeems to have brought it into diſrepute among attentive farmers. Moſtly ſingle; no awn; ſtraw ſhort.

2. "FRIEZLAND OATS." Theſe appear to be, at preſent, the favorite of the country;

and with good reaſon: they afford more ſtraw, and are thinner-ſkinned, than the Poland oat. Moſtly double; the larger ſometimes awned; the awn placed high.

3. "SIBERIAN OATS,"—more generally known by the name of TARTARIAN OATS. This is evidently a diſtinct SPECIES, unnoticed by Linneus. Each flower frequently contains three perfect florets; never leſs than two, and a pedeſtalled rudiment. Sometimes three perfect grains and a rudiment. The panicle, too, varies eſſentially from all the varieties of AVENA *ſativa*. AVENA *arundinacea* would be a proper term for it. The grains of this ſpecies are thin and ſmall; the largeſt awned; the ſmall ones awnleſs; the ſtraw tall and reedy.

The REED OAT may be ſaid to be, here, fairly in the hands of huſbandmen; a circumſtance which I have not obſerved, elſewhere. But it does not ſeem to be in ſufficient eſtimation, to ſecure an eſtabliſhed footing in the Diſtrict. The grain is light, and the *ſtraw* too much like *reed*, to be affected by cattle.

The particulars which are noticeable in the cultivation of oats in the Vale are,

The ſoil.

The quantity of ſeed.

The

The produce.

A ſingular mode of thraſhing.

SOIL. The rich lands, in the weſtern diviſion of the Vale, are peculiarly affected by oats. There have been inſtances of ſowing them, ſix or ſeven years ſucceſſively, on the ſame land. This, however, has been where the land has previouſly lain long in graſs. The ſoil, principally, a rich ſandy loam; a ſoil ſingularly productive of OATS; but not of *wheat:* which, in theſe ſoils, generally runs too much to ſtraw.

QUANTITY OF SEED. Five or ſix buſhels, and even a quarter of oats, an acre, are here ſometimes ſown! On ſome ſoils, it is found, that the more ſeed, the greater in proportion is the produce. A prudent man, however, ought, in my opinion, to aſcertain, by comparative experiments, *the extent of his ſoil*, before he ſow, on a large ſcale, more than ſix buſhels of oats, an acre.

PRODUCE. Ten quarters of oats, an acre, have been grown, on a piece of many acres. Seven or eight quarters, an acre, throughout a large farm, has not unfrequently been produced. One Vale farmer, laſt year, ſold and ſent to market a thouſand quarters of oats.

THRASHING. A novel practice has of late years taken place, with reſpect to the thraſhing of oats: not in barns, or under cover, as heretofore, and as the operation is ſtill carried on, in every other part of the iſland; but, in the field, or the ſtackyard, IN THE OPEN AIR!

This new method of thraſhing oats, took its riſe, probably, from the ordinary one of thraſhing rape, in this diſtrict (a proceſs which will be explained, in its place); the oats, at the outſet, being all thraſhed on *cloths*. But, now, it is common, I find, to thraſh them on a piece of plain *ſward*, or other level ground, *without a cloth!* it having been found, from experience, that if pigs and poultry be employed, to pick up the few which the broom leaves, the waſte is inconſiderable.

What may ſeem equally ſtrange, this buſineſs is frequently done, at harveſt; the oats being carried immediately from the field, in which they grew, to market!

This, however, is leſs extraordinary when we are acquainted with the market, which is always open, for new oats, in this country. The manufacturing parts of Weſt Yorkſhire uſe principally oaten bread; and new oats are coveted for oatmeal. This accounts for

their

their high price at harveſt, here, compared with that which they bear, in other places; and this was probably the inducement, which led to the ſingular expedient under notice.

The conveniency of thraſhing them, in the *field*, being by this means diſcovered, the practice was eaſily transferred from the field to the *ſtackyard*.

In one inſtance, to which I more particularly attended, the operation was thus conducted. A cloth was ſpread upon the ground (firſt made ſmooth) by the ſide of the ſtack of oats (in a ſtackyard). A boy threw the ſheaves, off the ſtack, upon the cloth. One man opened and ſpread the ſheaves, turned them when requiſite, and threw off the ſtraw when ſufficiently thraſhed. Four men being kept continually thraſhing.

In another, the oats were carried from the field to a graſs incloſure, and ſtacked in a place convenient for the expenditure of the ſtraw. In this caſe, the floor was a circle of cloſe-paſtured greenſward; about ten yards diameter; the opened ſheaves being ſpread, in a ring, with their heads toward the center, eight or ten thraſhers trod this ring, with a ſlow pace. One ſide ſufficiently thraſhed, the other was turned uppermoſt, and the

ſtraw, at length, ſhook off the circle. Women were employed at the floor, while two men ſtacked the ſtraw, as it was thrown off; and while others were employed, on the oppoſite ſide of the ring, in winnowing the oats, with a machine fan.

In a third, the oats were carried immediately out of the harveſt field to the thraſhing-floor, without a previous ſtacking. In this caſe, alſo, the floor was a ring of greenſward; —beaten firm and ſmooth, with flails, before any corn was laid upon it. The waſte is little, compared with the expence of a cloth.

The ſtraw was, in every caſe, ſtacked looſe; to be cut out, as hay: the common practice, I underſtand, when oats are thraſhed abroad.

When the ſtraw is thus freed from the corn, at harveſt, and is ſtacked in good order, it takes a heat in ſtack, and is ſaid to make excellent fodder. Cattle will ſometimes get forward in fleſh, upon ſuch ſtraw, alone.

But this happens, in the rich-land quarter, mentioned above. And, query, has not *a rich ſoil* a ſimilar effect upon the *ſtraw*, as it has upon the *hay*, which is grown upon it? The hay of Lincolnſhire or Gloceſterſhire will

will fatten large bullocks, which that of Norfolk would barely ſupport.

The ADVANTAGES held out, in favor of this method of thraſhing oats, are thoſe of diſpatch, and the ſaving of barn room; or the ſaving of carriage. A perſon who had a large quantity of oats upon an off-farm, ſome miles from his place of reſidence, without a barn upon it, gave a ſhilling a quarter for thraſhing, *in harveſt*; a buſy time. Had not this expedient been practiſed, a barn muſt have been built, or an inordinate quantity of carriage would have been requiſite.

The chance of bad weather ſeems to be the only OBJECTION to this practice. But there is always plenty of ſtraw to cover up the *corn* with; and it is found by experience, that a little rain upon the *ſtraw* does not make it leſs affected by cattle; at leaſt not perceptibly.

IN SOME CASES, the practice is, beyond diſpute, highly eligible in this country; and might, I have not a doubt, be profitably extended, to many other Diſtricts of the Iſland.

19.

PULSE.

NOTHING particularly noticeable has occurred to me, in this District, respecting any of the species of cultivated pulse; excepting that it is a pretty common practice to sow beans and peas (grey peas) together, under the name of "BLENDINGS." Sometimes "FITCHES" (probably a gigantic variety of the ERVUM *lens*) are sown among beans. These mixtures are found to increase the crop; and the component species are readily separable, with the sieve.

Formerly "LENTILS," the true ERVUM *lens*, were a common crop in this neighbourhood; but they are gone into disuse.

20.

TURNEPS.

TWENTY YEARS ago, the turnep crop was a ſtranger, in this Diſtrict. Even yet, it is far from being an eſtabliſhed crop.

Nevertheleſs, there are ſome men whom the ſpirit of improvement has ſtimulated to the turnep culture; and who may rank among the beſt turnep farmers, in the kingdom; thoſe of Norfolk excepted.

It muſt not, however, be expected that, after the ample detail I have given of the NORFOLK PRACTICE, much *new* matter can be collected, from the practice of this Diſtrict. I have met with only one particular which merits notice; and which, though a ſimple and eligible piece of management, I do not recollect to have met with in Norfolk.

In the inſtance of practice under notice, the *largeſt* of the turneps are *drawn and carried*

carried off, for fatting cattle; and the *ſmall* ones *eaten upon the ground*, with ſheep; eſpecially with ewes and lambs, in the ſpring.

This practice eaſes very much the labor of drawing, tailing, &c.—and gives the ſmall turneps room to grow, in the early part of winter; and to ſhoot freely in the ſpring.

If the ſmall ones be eaten off *in winter*, the ſoil is rendered free for the plow, as if the whole had been drawn and carried off. And in this particular only, reſts the ſuperiority of the Yorkſhire practice: one inſtance of practice in Norfolk having been noticed, in which the large ones were drawn, and the ſmall ones ſuffered to ſtand *until ſpring*. See NORFOLK, Sect. TURNEPS, Art. DRAWING.

RAPE.

21.

RAPE SEED.

THIS is the only Diſtrict in which I have met with rape (BRASSICA *napus*—Coleſeed) cultivated for its SEED.

It has long been the practice of the Vale; where large quantities have been annually cultivated; and where the cultivation of it is, I believe, equal at leaſt to that of any other Diſtrict.

It therefore merits a full and minute deſcription, in this place.

The requiſite diviſions of the ſubject are,

I. Succeſſion.
II. Soil and Management.
III. Manure and Management.
IV. Semination.
V. Management while growing.
VI. Harveſt management.
VII. Market.

I. SUCCESSION. Rape is generally ſown on SWARD. In the richer parts of the Vale,

Vale, it is ſometimes ſown on FALLOW, like turneps; and, ſometimes, it is ventured upon the STUBBLE of an arable crop; but, unleſs the ſoil be clean and rich, ſeldom with ſucceſs. On MAIDEN SWARD, as that of commons, or old grazing grounds, it generally turns out a very profitable crop.

II. SOIL, &c. Various as are the SOILS of this Diſtrict, it is ſown on EVERY SPECIES; and, generally, with a ſucceſs proportioned to its *richneſs*; the *ſpecific quality* of the ſoil being conſidered as immaterial; provided it has lain long in SWARD; and provided the ſward be reduced, and the ſoil ameliorated, by "PARING AND BURNING." See the Article SODBURNING.

III. MANURE, &c. The aſhes of the ſward, with generally a ſprinkling of LIME, are the univerſal and only manure, for rape on ſward. The aſhes, I believe, are principally depended upon for the rape; the lime being rather intended for ſucceeding crops.

IV. SEMINATION. The TIME OF SOWING, July: early enough to get a ſtrong *leaf*, and late enough to prevent its running up to *ſtem*, the firſt autumn. QUANTITY OF SEED, one gallon an acre; ſown generally

rally on the rough plit of one plowing (ſee SODBURNING); the ſeed being bruſhed in, with a thorn harrow.

Sometimes, the tops of the plits are lightly ſcarified, with a pair of tined harrows, before the ſeed be ſown; and ſometimes they are neither harrowed before, nor ſwept after the ſowing!

V. MANAGEMENT WHILE GROWING. I have heard of one or more inſtances of rape being HOED, with five or ſix inch hoes. but that is not the practice of the country. Neither hoing, nor weeding, of any kind, I believe, is uſually beſtowed on the rape crop.

One practice, however, in this ſtage of the management of rape, deſerves notice. The practice here meant is that of "TRANSPLANTING:" namely, filling the vacant patches (with which rape too frequently abounds) with plants drawn from the parts that are overſtocked.

This work is generally done, by women, who put in the plants with dibbles.

Plants thus removed ſeldom fail to take root; but they ripen ſomewhat later than the unmoved plants. Nevertheleſs, the practice is highly eligible.

The

The time of tranſplanting is October.

If the whole, or a principal part of a land, or a large patch,—happen to miſs,—the PLOW is ſometimes uſed in tranſplanting.

In this caſe, the plants are laid, or placed in a leaning poſture, by women, in every ſecond furrow, about a foot apart in the furrows. The roots are of courſe covered with the next plit; and a ſecond plit being added, another row of plants are laid againſt it. The diſtance, therefore, is about eighteen or twenty inches, by twelve; and this, in good land, is found to be ſufficiently near.

The expence of tranſplanting rape, in this manner, has been found, on accurate obſervation, to be about four ſhillings, an acre: namely, eight women, at ſixpence a day each.

This expedient leads to an operation which would, in my opinion, be a valuable

IMPROVEMENT IN THE CULTURE OF RAPE SEED.

The great objection to this crop, and that which deters many judicious men from cultivating it, is the length of time it occupies the ſoil. Being ſown in July or Auguſt, the whole tribe of biennial weeds have time to eſtabliſh themſelves, before winter; and not being

being reaped, until July or Auguſt following, they have time to mature and ſhed their ſeed.

The graſſes, and ſtrong-rooted weeds of every kind, likewiſe gain, in that time, a degree of poſſeſſion, which is difficult to be ſet aſide. The ſoil, too, gets out of tilth, by lying ſo long a time without plowing.

ONE PLOWING, IN AUTUMN, would remove, or greatly alleviate, thoſe evils. The biennials would thereby be extirpated; the graſſes and ſtrong-rooted weeds be checked; and the ſoil be preſerved in tillage.

The operation which ſtrikes me, as being ſingularly eligible to be adopted, is that of TRANSPLANTING THE WHOLE CROP.

The *method* I ſhould propoſe is this: draw, from the *firſt land*, a ſufficiency of plants to plant the *laſt land* with, and bury their roots in a vacant ground, until wanted.

Plow the firſt land (thus burying the weeds and the refuſe rape) and, at the ſame time, ſtock it, in the manner above deſcribed, with plants, drawn from the ſecond land.

The firſt land finiſhed, ſupply the ſecond with plants from the third, and ſo on, till the whole be finiſhed; planting the laſt land with the plants in reſerve.

Beſides

Beſides the ADVANTAGES already ſet forth, the entire piece would, by this means, be furniſhed with *prime plants*; *equal in ſtrength*; and *regular in diſtance*. Hence, the ſoil would not only be *evenly* occupied, but the crop would *ripen equally*. The large and uniform diſtance of the plants, too, would give free admiſſion to the *hoe*:—even a narrow *horſe hoe* might be uſed between the rows.

Thus, the fouleſt crop which farmers have to deal with, might, for a ſmall expence, be rendered a FALLOW CROP *of the firſt eſtimation.*

If ſodburnt land were managed in this manner, the firſt or ſeed plowing ought to be very ſhallow; acroſs the ridges (if any); and the ſecond, or tranſplanting plowing, longway of the lands, acroſs the firſt plowing; gathering up the ridges dry againſt winter.

A manured fallow, a rich wheat ſtubble, or other land ſufficiently clean, and in ſufficient heart for rape, might be planted with it in a ſimilar manner; raiſing plants for this purpoſe in a detached ſeed bed.

VI. HARVESTING. Rape is generally RIPE in July; ſooner or later, according to the ſeaſon. It is conſidered as fit for cutting when

when the forwardeſt of the ſeed has begun to turn black.

It is univerſally CUT with ſickles, by women; who, in the ordinary management of the country, lay it in broad thin "reaps," upon the tops of the ſtubble; which they generally cut about a foot high, or as high as the lower branches will allow.

In theſe "reaps,"—ſhoves or open ſheaves,—it lies until the ſap be pretty well DRIED out of the greeneſt, and the ripeſt is ready to open its pods. If it lie too long, much of the prime ſeed will be loſt in the field; if it be thraſhed too green, much will be left in the pods, and that which is thraſhed out will be difficult to cure.

The METHOD OF THRASHING (which has been practiſed in the Vale, perhaps, ever ſince rape has been cultivated in it) will require more deſcription than I can well perſuade myſelf to beſtow upon it. But a PUBLIC "RAPE-THRASHING," conducted as it is in this country, is one of the moſt ſtriking ſcenes which occur in the field of Rural Economy. Contending armies can ſcarcely exhibit, to the diſtant eye, greater tumult; nor can the parade boaſt of better diſcipline,

than may ſometimes be obſerved, in a well conducted rape thraſhing.

If the quantity to be thraſhed be large, as twenty or thirty acres, the whole country, for many miles round, are collected. The days of thraſhing are conſidered as *public days*; the lord of the harveſt keeping *open field*, for all who chooſe to enter; ample proviſion of meat and drink being made, for this purpoſe. A wake or a fair is not a ſcene of greater jollity.

It is not common, however, for unbidden gueſts to go to theſe rural meetings, without aſſiſting, or at leaſt offering their ſervices to aſſiſt, in forwarding the buſineſs of the day. But to make ſure of hands, for the more laborious departments, men and women are previouſly retained, with wages over and above the ſpoils of the feaſt.

Alſo previous to the day of thraſhing, a "rape cloth,"—"carrying-cloths,"—and other neceſſaries, are to be provided. The cloths are in the hands of a few men, who let them out, at ſo much a day, or ſo much an acre. A rape cloth, of the largeſt ſize, meaſures twenty yards ſquare: weighing more than half a ton weight. Heſſen is the

uſual

uſual material of which it is made. The hire of ſuch a cloth is 15s. a day.

Alſo, before the thraſhing, the rape and the ſtubble are to be cleared away from the place (or places, if the piece be large) where the thraſhing floor is to be made; the clods being taken off, and the hollows filled up, where the cloth is intended to be laid.

The buſineſs of the day is thus conducted: The men are divided into carriers, thraſhers, and floor-men. Women fill the carrying-cloths; and boys hold them while filling. Theſe cloths are made of canvas, about ſix feet ſquare, with poles fixt on two oppoſite ſides (in the manner of a rolling map); openings being left, in the middle, between the poles and the canvas, for two men to run their arms through, one on either ſide; the poles reſting, by their middles, on the men's ſhoulders; the cloth filled with rape hanging between them. In theſe cloths the whole of the crop is carried to the thraſhing floor.

The floor-men are divided into layers-on, turners, takers-off, rake-men, riddlers, &c. &c. &c.

The rape to be thraſhed is ſpread thin upon the cloth, in a circle, as large as the cloth will contain.

The thraſhers move continually in this ring; marching with a ſlow ſtep, in pairs, and in two diviſions; the individuals of each diviſion following one another, as cloſely as the nature of their employment will allow them.

The firſt diviſion are preceded by the layers-on, and followed by the turners; and cloſe upon the rear of the ſecond diviſion follow the takers-off; who with wooden-tined forks ſhake and throw-off the ſtraw; which is piled in heaps, by others, with longer implements.

Finally, the rake-men run off the ſeed, with the heads of their rakes thruſt before them; forcing the ſeed into receſſes formed within the ring, or upon the corners of the cloth; where groups of fillers, riddlers, &c. &c. are employed in ſeparating the ſeed, from the principal part of the pods, and ſhort ſtraws, which beat off in thraſhing; while others are equally buſy in putting the unwinnowed ſeed into bags, and carrying it to the "pie" or the waggon.

Toward the cloſe of the day, when the ſtraw has riſen in mountain piles of almoſt ſilver brightneſs; when the field of employment appears on its largeſt ſcale; when every

every department is in full work; and when every individual is animated, and not yet ſatiated, with the *entertainments* of the day; the rape thraſhing affords the contemplative mind a pleaſing ſight; and would afford the pencil a pictureſque ſubject.

The two diviſions of thraſhers, moving in cloſe phalanx, with flails nimbly brandiſhing, ſometimes in open view, ſometimes partially hid among the piles of ſtraw; the clothmen buſy and attentive to their various employments; the team drawing off the loaded ſeed; the carriers, from every hand, preſſing to the thraſhing floor, with their ſeemingly cumbrous loads; and the diſtant groups of fillers, ſcattered on every ſide of the foreground; could not fail of affording matter intereſting to the painter; eſpecially in a country where a ſuitable offscape is ſeldom wanting.

It were almoſt pity that a ſcene, at once ſo pictureſque and ſo truly ruſtic, ſhould ſink into oblivion, as in all probability it will, in a ſhort courſe of years. A more frugal management is growing into eſteem; and it is highly probable that, in a few years, *public* rape thraſhing will be diſcontinued, and, in a few years more, be forgotten.

The ſeed is CURED (that is, takes the heat which is incident to all recent vegetables) in the chaff or pods—provincially, "pulls"—either on a barn floor, a granary, &c. or in "PIES" built in the field, for this purpoſe, with plaited ſtraw.

The form is that of a corn buſhel; the diameter, ſeven or eight feet; the height three or four feet. This large ſtraw baſket-like receptacle is filled with rough ſeed, to the brim, topped up, in a conical form, with ſtraw, and the whole ſecured with a coat of thatch.

This is more generally done, when the markets happen to be low, at the time of thraſhing; as, in theſe pies, the ſeed may be kept any length of time; provided a ſufficient proportion of pulls be retained among it; and provided the ſize of theſe receptacles, and conſequently the quantity of ſeed depoſited in them, be not too large.

When the ſeed has done heating, and a market offers, it is ſold, carried to the barn, winnowed, and ſent to market.

The INCONVENIENCIES of *public rape thraſhing* now require to be mentioned. The buſtle and hurry, ſo diſſimilar to the placid routine of huſbandry, which are unavoidable

on

on theſe occaſions, are diſagreeable to moſt men; the expence, too, is ſometimes unreaſonable; the hazard by weather conſiderable; and the waſte which is generally made by the over-aſſiduouſneſs of unſkilful volunteers, are all of them objections to the practice.

Beſides, the *ſtraw* and the *pulls* are, in this caſe, little leſs than waſted, being uſually *burnt in the field* for their aſhes, which are very few in quantity, and the neat profit ariſing from them inconſiderable.

The ſeaſon too is inconvenient: whether in hay time or harveſt, every other employment, however neceſſary, bows to the rape thraſhing.

It were no wonder that inconveniencies, ſuch as theſe, ſhould induce ſenſible men to deviſe a more eligible management of this profitable crop. Yet ſuch is the infatuation of an eſtabliſhed cuſtom, that there has not, I believe, been an inſtance of more than one deviation, originating in the *Vale*, during the centuries of time which rape may have been cultivated within it.

In this inſtance, the rape was HARVESTED AS WHEAT;—reaped, bound, ſhucked, carried into the barn, *cured in the ſtraw*, and

thraſhed out when markets and conveniency required.

Binding it, while yet in a flexible ſtate, ſecured it from the waſte, by ſhedding, which is more or leſs incurred, by handling looſe reaps, in a dry parched ſtate, with the pods ready to open on the ſlighteſt touch.

By *ſetting it up* in ſtooks, the waſte committed by birds was much leſſened, eſpecially that by wood pigeons, which, ſettling upon the reaps, beat out tenfold what they eat; whereas, in ſhucks, that which is beaten out runs down into the ſheaves and is ſaved.

In *carrying*, a tall pole was fixed at each corner of the waggon, and a large cloth thrown over them, hanging in a bag to receive the load, and to catch the ſhedded ſeed.

To prevent *waſte in the barn*, the floor of the mow was covered with SOFT HAY, which ſtops the running of the ſeed, and off which it may be eaſily gathered, or thrown upon the thraſhing floor; whereas *ſtraw*, being more open, admits the ſeed to run down among it, and is the cauſe of conſiderable waſte.

The *expence*, under this management, is comparatively much leſs, than it is in a public thraſhing;

thraſhing; more eſpecially, if the piece to be harveſted be ſmall; as four or five acres, for inſtance, which create as great a buſtle, and cauſe almoſt as great an expence, as twice that quantity.

By an accurate account of the expence of five acres of rape, harveſted in the uſual manner, ſome years ago, the expence appears to be 23s. an acre. The ſame quantity would now, under the preſent price of living, and the preſent ſtyle of treating upon theſe occaſions, coſt from thirty to forty ſhillings an acre.

By an account, equally accurate and particular, it appears, that four acres and three quarters, harveſted as wheat, a very few years ſince, coſt only 16s. 6d. an acre, tho' thraſhed out in harveſt.

Reaping—three women, at 8d. each	2 0
Binding—a man 2s. a boy 6d.	2 6
Carrying—three loads, at 18d.	4 6
Thraſhing—three days *in harveſt*, at 2s. 6d.	7 6
	16 6

But the ſaving of expence is far from being the greateſt ſaving by this practice. The VALUE OF THE STRAW, to cattle in winter,

winter, is found to be very conſiderable. The *ſtover* (that is, the pulls and points of the ſtraw broken off in thraſhing) is as acceptable to them as hay; and the *tops* of the *ſtraw* are eaten with avidity, "nearly equal to oat "ſtraw, better than wheat ſtraw."—If it be well got, the *ſmaller butts* will be eaten up clean. The *offal* makes excellent litter for the farm-yard; and is uſeful for bottoms of mows, ſtacks, &c. &c.

If we conſider the nature of rape, how nearly it is allied to the turnep, and how grateful to cattle while in a green ſtate, it is no wonder that the pods, and finer parts of the ſtems ſhould be acceptable to them, in a ſtate of dryneſs. Setting fire to the whole in the field is a barbarous practice which ought to be exploded.

Objectionable, however, as the common mode of harveſting rape, in this country, undoubtedly is, it has, during time immemorial, been implicitly adhered to (the inſtance laſt-mentioned only excepted) until this year (1787), when an IMPROVEMENT has taken place, which bids fair to effect a revolution, in this department of the huſbandry of the Vale.

In

In this improved method, the rape is all BOUND IN SHEAFLETS, about half the ſize of wheat ſheaves, with green underling plants of rape, or with long graſs or other weeds, with which the ſtubble of rape too generally abounds.

Theſe ſheafiets are laid lightly upon the tops of the ſtubble to dry, not ſet up in ſtooks, as in the inſtance above noticed. When they are half-dry, they are, or ought to be, turned; and when fully dry, are STACKED IN THE FIELD.

The ſheaves are *carried* to the ſtack in ſledges; each ſledge being furniſhed with a cloth or large bag, ſupported by a tall frame, riſing about four feet above the body of the ſledge, which is light and drawn by one horſe. Theſe ſledges are loaded, that is to ſay, the bags are filled, by women, and are taken to the ſtacks, by boys riding upon the horſes. A large cloth is ſpread by the ſide of the ſtack, for emptying the ſledges upon; which is done by overturning them; ſo that no time is loſt, either by the ſledges, or the ſtackers. A large field of rape is ſoon got together, in this way.

When it is thus *ſecured in ſtack*, and has taken its *heat in the ſtraw*, it remains at the option

option of the owner to thraſh it when, where, and in what manner he pleaſes; that is, as markets, leiſure, and other circumſtances may direct him. It is obſervable, that rape ſeed, *cured in ſtack*, generally turns out a fine ſample.

One thing relative to this practice is too remarkable to paſs unnoticed. It has been an *eſtabliſhed*, and, I underſtand, the *ordinary practice*, during many years, of a Diſtrict (the Egton quarter of the Morelands) ſituated not more than ten miles from that part of the margin of the Vale (Lockton) at which it this year made its entry!

This is a ſtriking inſtance of the ſlow progreſs, which practices in huſbandry, howſoever excellent, have hitherto made, in travelling from one Diſtrict to another.

HOW ESSENTIALLY NECESSARY, THEN, IT IS TO REGISTER THEM, ACCURATELY AND FULLY, IN THE DISTRICTS OF THEIR ORIGIN, OR IN PLACES WHERE THEY HAVE REACHED THE HIGHEST DEGREE OF PERFECTION, AND TO DISTRIBUTE SUCH REGISTERS, RECIPROCALLY, AMONG THE VARIOUS DISTRICTS OF THE ISLAND.

VII. MAR-

VII. MARKETS. There are no oil mills in the Vale. The only market is Malton, from whence rape ſeed is ſent, chiefly I believe, into the manufacturing part of the county, where oil mills are numerous.

The PRICE, ten to thirty pounds a laſt, of ten quarters.

VIII. The PRODUCE of a middling crop is four quarters an acre: five quarters an acre have not unfrequently been produced.

General Observations on the Culture of Rape Seed.

The fluctuation of price, which rape ſeed is ſubject to, being in ſome meaſure, perhaps, influenced by the ſucceſs of the Greenland fiſhery, and the hazard to which the crop is expoſed, render it in a degree *uncertain*.

FROSTS, in ſpring, when rape is in blow, or in the critical ſtate between the bloſſoming and the formation of the pods, are its greateſt enemies. In the ſpring of 1783 much miſchief was done by froſts, in May. One perſon had a piece of twenty acres almoſt deſtroyed by it. In the beginning of May, this crop promiſed eight or ten pounds an acre: the ſoil rich, the crop on the ground good, and the price above par. In the wane of May, the twenty acres were offered for twenty

twenty pounds! a loſs of one hundred and fifty to two hundred pounds, in one article, and perhaps in one night!

But every crop is ſubject to hazard, and to a fluctuation in price; and although rape be liable to be cut off by froſt, it rarely is deſtroyed by that means. Upon the whole, it may be conſidered as one of the moſt profitable crops in huſbandry. There have been inſtances, on cold unproductive old paſture lands, in which the produce of the rape crop has been equal to the purchaſe value of the land.

This productiveneſs, or, in other words, the profitableneſs of the rape crop, is, however, held out by ſome men as an objection to its culture, under an idea that it muſt impoveriſh the ſoil.

Does not every *productive* crop *impoveriſh* the ſoil? Yet who will argue that good crops are leſs eligible than bad ones? A good crop enables the farmer to repleniſh and meliorate his ſoil, with manure and tillage, which ought (generally ſpeaking) always to be in proportion to the recent productiveneſs of the ſoil, and to the ſtate of foulneſs and tilth, in which the nature of recent crops have placed it.

If,

If, in the culture of rape, the ſoil be permitted to lie undiſturbed, either by the plow or the hoe, from ſeed time to harveſt, ſuffering weeds of every ſpecies to mature and ſcatter their ſeeds, and to gain an eſtabliſhment in the ſoil; and if, at harveſt, the ſtraw be burnt in the field, and the aſhes be ſent to market, rape is in truth an impoveriſhing crop.

But were the ſoil to be plowed, in autumn, and to be hoed during the enſuing ſummer; and were the ſtraw, &c. inſtead of being burnt, to be conſumed in the farmyard, as fodder and litter, I am of opinion that rape, in many caſes, would be the moſt eligible crop the farmer could make choice of *.

POTA-

* Whether oleaginous or farinaceous crops—whether five quarters of rape or five quarters of wheat an acre—incur the greater impoveriſhment of ſoil, is a ſubject which is yet in the hands of theory. While the food of vegetables, and the vegetable economy at large, are ſo little underſtood, as they appear to be at preſent, all argument reſpecting the comparative impoveriſhment of the ſoil, by different ſpecies of vegetables, muſt be futile.

22.

POTATOES.

CONSIDERABLE quantities of Potatoes are raiſed, in the Diſtrict under ſurvey. Almoſt every man, let his farm be ever ſo ſmall, cultivates potatoes in the field: not in the ordinary method, practiſed in moſt Diſtricts of the kingdom: not with the *ſpade*, but with the PLOW: a practice which has been followed, invariably, for near a century. I do not mean to ſpeak of it as a practice peculiar to Yorkſhire; but, I believe, there is no other county in which it is ſo prevalent. It therefore merits particular notice here.

It will be neceſſary to conſider ſeparately,

I. The Species or Variety.
II. The Succeſſion.
III. The Soil and Tillage.
IV. The Manure uſed.
V. The Seed and Setting.
VI. Cleaning the Crop.
VII. Harveſting.
VIII. Preſerving the Roots.

IX. *Pro-*

IX. Produce.

X. Markets; or Application of Produce.

XI. The Effect of the Potatoe Crop on Soils.

I. There is only one SPECIES of Potatoe —SOLANUM *tuberoſum*: — but the VARIETIES of that ſpecies are endleſs. Every county has its favorite kinds; though very different from one another. To enumerate the ſorts, of any particular Diſtrict, would be filling the page with barbarous terms, without conveying any uſeful information to the reader.

The VARIETIES of potatoes are temporary, in every Diſtrict; having their entrances and their exits. The rough-ſkinned "Ruſia taty" of this Diſtrict was long a favorite; but is now, I believe, with many others that have flouriſhed for a time, entirely loſt.

There is ſome reaſon to believe, that the diſeaſe, which has of late years been fatal to the potatoe crop, in this and other Diſtricts, under the name of the CURL, or "CURLED TOPS," has ariſen from too long a continuance of *declining varieties*. Be this as it may, it appears to be an opinion, eſtabliſhed here, by ſome years experience, that *freſh*

varieties, raiſed from ſeed, are not liable to that diſeaſe.

This matter, however, may not yet be ſufficiently aſcertained, to be regiſtered here as a fact. This diſeaſe made its appearance, ſome years ago, with more or leſs effect, in, I believe, every part of the kingdom. In ſome parts of it, its continuance was ſhort; its effects have ceaſed; and are now almoſt forgotten. In one inſtance (which I may have occaſion to mention in another place), its removal was, in all probability, owing to the introduction of new varieties.

The Diſtrict under ſurvey furniſhes a remarkable inſtance, reſpecting this diſeaſe. The Morelands are, at preſent, in a manner free from it, while the Vale is ſtill, in ſome degree, infected with it. Plants procured, from the Morelands, remain free from it, in the Vale, *the firſt year*; but, being continued, become liable to the diſeaſe.

The diſeaſe of curled tops is ſeldom obvious, at the firſt coming up of the plants; but attacks them as they increaſe in ſize; the entire top becoming dwarfiſh and ſhrivelled, as if affected by drought, or loaded with inſects: they nevertheleſs live, and increaſe, though ſlowly, in ſize; but the roots

are

are unproductive. Some crops have been almoſt wholly deſtroyed by this diſeaſe.

Where the attack has been partial, *weeding out the diſeaſed plants*, as they failed, is ſaid to have had a good effect. And, *it is ſaid*, the Morelanders got rid of the diſeaſe, through this means.

The method of RAISING POTATOES FROM SEED is known to ſome intelligent huſbandmen, here. The prevailing method is this:—In autumn, when the apples are beginning to fall ſpontaneouſly, they are gathered, by hand, and preſerved, in ſand, until ſpring, when they are maſhed, among the ſand, or among freſh mold; ſeparating the ſeeds, and mixing them evenly with the mold. As ſoon as ſpring froſts are judged to be over, they are ſown, in fine garden mold; and, as faſt as the plants get into rough leaf, and are ſtrong enough to be handled without injury, they are tranſplanted, from the ſeed bed, into another bed of freſh rich mold—in rows; which are kept clean, during the ſummer. In autumn, bunches of ſmall potatoes are found, at the roots of theſe plants; varying in ſize, the firſt year, from the hazel nut to the crab. Theſe being planted, next ſpring, produce potatoes of the middle ſize; but

they do not arrive at their fulleſt bulk, until the third or the fourth year.

Where the uſe of the ſtove, or the garden-frame, can be had, this proceſs may be ſhortened. The ſeeds being ſown within either of theſe, early in ſpring, the plants will be fit to be planted out, as ſoon as froſts are gone; by which means the ſize of the roots will be much increaſed, the firſt year; and will, in the ſecond, riſe nearly to perfection.

Potatoes, raiſed from ſeed, are a miſcellany of endleſs varieties. Sometimes, theſe varieties are planted promiſcuouſly; ſometimes, particular varieties are ſelected.

In SELECTING VARIETIES, from ſeedling potatoes, two things are to be attended to; the INTRINSIC QUALITY of the potatoe, and its PRODUCTIVENESS. If theſe two deſirable properties can be found, in one plant, the choice is determined. To this ſpecies of attention, and induſtry, we are indebted for the many valuable kinds, which have been, and now are, diſtributed throughout the Iſland.

It is obſervable, however, that varieties of potatoes, like thoſe of corn, are *partial to particular ſoils* and ſituations. Hence, the propriety of *huſbandmen* raiſing potatoes from ſeed;

ſeed; as by this means they obtain, with a degree of moral certainty, *a ſort adapted to their own particular ſoils and ſituations.*

But it has been already obſerved, that *varieties degenerate:* the old favorite ſorts of this Diſtrict were driven, until ſome of the individual plants barely produced their ſeed again.

Whoever has attended cloſely to the work of taking-up potatoes, muſt have obſerved, *the great inequality in the productiveneſs of individual plants.* The difference in the produce of adjoining roots, where no diſparity of ſoil can influence, will ſometimes be three or four fold. Hence, it is evident, that each variety has its SUB-VARIETIES; through whoſe means, it can hardly be doubted, the *parent variety* may be *improved*, and its *continuance* be *prolonged.*

Thus, the farmer has another mean in his power, of improving the quality and productiveneſs of his potatoe crop, by IMPROVING VARIETIES, or, in other words, SELECTING SUB-VARIETIES, ſuperiorly adapted to *his* ſoil and ſituation.

Every attentive cultivator of this valuable root muſt be acquainted with the wide difference, in *neat profit*, between a *full* and

even a *middling* crop. The rent of land, the ſeed, and the labor are the ſame, whether the produce prove great or ſmall. How imprudent, then, to propagate an unproductive kind, when the means of obtaining a productive one are ſo eaſy and obvious.

II. SUCCESSION. In the common practice of the country, potatoes are cultivated as a FALLOW CROP FOR WHEAT: the cleaneſt part of a ſtubble, or other ground, intended to be ſummer fallowed for wheat, being ſet apart for potatoes. They are ſeldom planted on SWARD; the common predeceſſor of the potatoe crop, in moſt other places. It is, however, underſtood, here, that they do beſt upon "FRESH LAND:" that is, land which not been too long under the plow.

III. SOIL and TILLAGE. Formerly, potatoes were confined to *light friable loams:* and the ſorts which were cultivated, in thoſe days, might require this reſtriction: now, they are grown in all ſoils; different varieties being found partial to different land. It is obſerved, however, that let the ſort be ever ſo well adapted to the ſoil, *heavy cold land* ſeldom gives light well flavored potatoes.

The ſoil is broken-up, in winter or ſpring, and worked-over, two or three times, with the

the plow and harrow, as for turneps; getting it as fine, as the nature of an early ſpring fallow will admit of.

IV. MANURE. DUNG: generally long ſtrawy dung; which is ſet in heaps, upon or near the patch to be planted; previouſly to the ſeed plowing. The quantity is twenty to thirty cart loads, an acre.

V. SETS and PLANTING. Formerly, it was the common practice of the Diſtrict to plant *whole* potatoes. In taking up potatoes, they were ſorted, into large, ſmall, and *ſets*; which were of the middle ſize.

At preſent, that practice is, I believe, entirely laid aſide: it being the cuſtom, now, to *cut* potatoes, into more than one ſet: namely, middle-ſized ones into two, large ones into three or four; leaving the cuttings much larger, than is done in moſt other Diſtricts; where eight or ten ſingle-eyed ſets are ſometimes cut out of one potatoe.

The reaſon given for the uſe of LARGE CUTTINGS is, that the young plants may acquire, at the outſet, a ſtrong vigorous habit, and thereby be enabled to throw out and maintain a ſufficient number of roots and branches. And the reaſon I have heard given for uſing large potatoes, in preference

to ſmaller ones, is, that "large ones are more likely to produce large ones again." The reaſoning, in both caſes, appears to be good.

The ſets being prepared, the *ſeed plowing* is given. In this plowing, the land is laid up in ridgets, ſimilar to thoſe in which gardeners leave the ſoil, in the operation called trenching, when it is not intended to be immediately cropped. The width of theſe ridgets depends on the judgement of the planter; from two and a half to three feet is the uſual width.

This operation is performed with a COMMON PLOW, in the way in which rice-balking, raftering, or half plowing, is uſually done; endeavouring to leave the bottoms of the drills *ſtraight*, *narrow*, and *clean*. One ſtrong horſe, if the ſoil be light and fine, or two horſes, one before the other, if otherwiſe, is the beſt team for this work. Horſes abreaſt are apt to foul the drills. The uſual depth of the drills is that of the cultivated ſoil.

In theſe drills, the ſets are dropt, by women or boys, at twelve to eighteen inches diſtance, according to the judgement of the farmer. If the quantity of land be given, and the number of ſets be indefinite, twelve inches may be a ſufficient diſtance; but if, as is generally

generally the caſe here, the quantity of land be greater in proportion, than the number of ſets, the farther they are planted aſunder, the greater will be the produce in proportion to the plants.

While one party are planting, another are carrying on the dung, in ſcuttles; either ſcattering it regularly along the drills, or applying it partially to the plants; covering each ſet with its due portion of manure. This may appear to be a tedious buſineſs; it certainly is a dirty one: but not ſo tedious as inexperience may ſuggeſt. If the loads be broken into three or four heaps, and theſe be diſtributed conveniently, five or ſix women will plant and cover an acre, a day, in this manner.

The plow cloſes the buſineſs of planting: the ridges are either returned upon the plants and dung, with a common plow, or are ſplit, with a double-mold-board plow; in either caſe, raiſing the ſoil into ridgets, over the drills of potatoes.

VI. CLEANING THE CROP. As ſoon as the young plants make their appearance, the land is harrowed, lengthway of the ridges; to tear up the ſeed weeds which grow upon their crowns, and to ſmother thoſe in

the

the trenches, with the mold. In a ſhort time afterward, the plow, with the ſhare broad and ſharp, is run through each interval, and the rows cleaned with the hoe. In a few weeks more, the intervals are again ſtirred, with the plow, throwing the earth towards the plants, and the hand hoing repeated. If leiſure and the depth of the ſoil will permit, a ſecond earthing may be given; and, when the plow and the hoe are no longer able to find admiſſion among the tops, hand weeding is, or ought to be, made uſe of.

By theſe means, land may be as effectually cleaned from *ſeed weeds*, as by fallowing; and no man, who has any regard for his own intereſt, or for his character as a farmer, would ever think of planting potatoes, in a bed of *couch and thiſtles*.

VII. HARVESTING. Formerly, potatoes were taken up with the *plow*; endeavouring to get the ſhare below the potatoes, and to overturn the ridges. But, without great care, many potatoes were cut, in this operation, and many more unavoidably buried; ſo that picking, again and again, was neceſſary; and, at laſt, ſome were left in the land.

At preſent, the prevailing practice is to take them up with common *dung forks*: an operation

operation which is, at once, effectual; and which is by no means ſo tedious, when potatoes are grown in ridges, as when in the ordinary way, the entire ground is to be dug over. In ridges, the roots are diſtinct, and are eaſily laid bare; being open on three ſides, with free vent for the mold. The fork being forced down behind them, the whole nidus are at once expoſed.

VIII. The way of PRESERVING POTATOES, here, has been either to bury them, in deep pits, within the ground; or to houſe them, in a barn or other out-building, guarding them on every ſide with ſtraw. The dangers to be guarded againſt are *froſts* and *wet*.

At preſent, (the evil effects of *deep pits* having been diſcovered) the growing practice ſeems to be that of laying them in long ridge-like heaps, upon the *ſurface* of arable ground, and covering them up, with the ſurrounding ſoil, ridged-up in a roof-like form.

A LONG ARCHED VAULT, running endway into the ſide of a hill (or the ſide of a pit or other hollow) with a door at the end, level with the ground below; with a road over the top; and with one or more ſhooting holes,

holes, similar to those of coal vaults under the streets of towns, would be an eligible receptacle for potatoes.

IX. MARKETS and APPLICATION. In this part of the District, few potatoes go to *market*, except for sets in the spring.

Nor is the *application* of potatoes to *fatting stock* extensive. In *this* District, SWINE are almost the only species to which they are applied. Some few are given to COWS.

But in the bottom of the VALE OF YORK, great quantities have, of late years, been applied to the FATTING OF CATTLE. They are, I believe, invariably given to them raw; with alternate meals of hay or ground barley: the method of fatting, with potatoes, being similar to that of fatting, with turneps.

X. PRODUCE. The quantity of potatoes grown upon an acre, under the management above described, I have not been fortunate enough to ascertain, with sufficient accuracy. It is much less than what arises from old grass land, dug over with the spade, and filled with plants, as is the practice of the MIDLAND COUNTIES.

XI. THE EFFECT OF POTATOES ON LAND. Various are the opinions of professional men, on this subject. One as-

serts

ſerts that they are *great impoveriſhers of the ſoil*; that they are *hurtful to the corn*, and *ruinous to the graſs*, which ſucceeds them. Another is clearly of opinion, that they are *friendly to corn*, and *not enemies* to graſs.

The diſpute may, perhaps, be ſettled, ſatisfactorily, in this manner.

The potatoe contains, indiſputably, a great quantity of nouriſhment; and is therefore, perhaps, as indiſputably, a great exhauſter of the ſoil.

But the quantity of vegetable nouriſhment carried off, in the potatoe crop, is not the only cauſe of exhauſtion: it is notorious to common obſervation, that this crop leaves the ſoil in a ſingularly *friable fertile ſtate*; cauſing an abundant produce of the crop which ſucceeds it.

If, taking the advantage of this *prodigality of the ſoil*, the huſbandman keeps cropping it, year after year, with corn,—and, when it will no longer anſwer his unreaſonable expectations, lays it down to graſs,—it is no wonder that it ſhould be unproductive: for having laviſhed all its riches on an *ungrateful* occupier, it is of courſe reduced to the extreme of poverty.

On

On the contrary,—if, after a crop of potatoes well dunged for, only one or two crops of corn be taken, and the land laid down to graſs, *while yet in a ſtate of fertility*, the potatoe crop is, to vulgar apprehenſion at leaſt, friendly to the crops which ſucceed it.

Hence it follows, that land which has been cropped with potatoes ſhould, preſently afterwards, be laid down to graſs; or ſhould be *timely repleniſhed*, with a quantity of manure, *proportioned to the degree of exhauſtion it has undergone*.

General Observations.

The value of POTATOES as a FALLOW CROP, and as an article of FOOD FOR CATTLE, compared with TURNEPS and CABBAGES for the ſame purpoſes, may be conſidered thus:

Potatoes are *more nutritious*, and, in the opinion of thoſe who have uſed them, fat cattle much *quicker*, than either turneps or cabbages. Potatoes, too, being ſecured from the ſeverities of winter, are a more *certain* article of fatting, than turneps or cabbages; both of which are liable to periſh, under an alternacy of froſt and thaw; and the turnep, more particularly,

ticularly, is locked up, or rendered difficult to be come at, during a continuance of ſnow or froſt. Turneps and cabbages, if they outweather the ſeverities of winter, occupy the ſoil in the ſpring, when it is wanted to be prepared for the ſucceeding crop; while potatoes, if properly laid up, are a food which may be continued without inconveniency, until the cattle be finiſhed, or the graſs has acquired the requiſite bite for finiſhing them in the field.

On the other hand, potatoes are a diſagreeable crop to cultivate: the planting is a tedious dirty buſineſs; and taking them up, may be called the filthieſt work of huſbandry; eſpecially in a wet autumn; and ſtill more eſpecially, on a *tender tenacious ſoil:* while, upon *weak thin land*, the extraordinary quantity of manure, which is requiſite, renders them impracticable to be cultivated, on a large ſcale, in ordinary ſituations.

Upon the whole, it appears to be evident, from the information I am at preſent in poſſeſſion of, that the three crops under conſideration are each of them ſuperiorly eligible, when they are cultivated on the SOILS, to which they are peculiarly, and reſpectively, adapted.

A ſtrong

A ſtrong tenacious ſoil is equally unfit for potatoes and turneps, while it is ſingularly adapted to CABBAGES.

Light, ſhallow, unproductive ſoils are equally unfit for potatoes, and cabbages; while, with good huſbandry, TURNEPS may be grown on them with advantage.

Rich, ſound, deep, ſandy loams are acceptable to the three. But the POTATOE appears to be poſſeſſed of ſome ſuperior properties, which render it, at leaſt, an object of experiment, in CLEAN RICH SOILS, as a fallow crop on a large ſcale, and as a food of farm ſtock.

23.

FLAX.

WITHIN the laſt twenty years, a conſiderable quantity of flax has been grown, in the Vale. The richer parts of it are not ill adapted to this crop; but whether theſe parts are now gone over, or whether the reſtrictions of landlords have checked the ſpirit of

of cultivation, the culture of it is, now, evidently on the decline.

The flax crop, however, being confined to a few individual Diſtricts, it may be proper to give the outline of its management, in this; although it cannot here be called a ſtaple crop. I will juſt mention,

1. The Species cultivated.
2. Soil and Succeſſion.
3. Soil Proceſs and Manure.
4. Semination.
5. Vegetating Proceſs.
6. Management of the Produce.
7. Markets.

I. SPECIES. We have only one SPECIES of cultivated flax—*linum uſitatiſſimum*.—The *variety*, cultivated here, is the blue, blow, or lead-coloured flax—-provincially, "BLEA LINE."

II. SOIL and SUCCESSION. Flax requires a RICH DRY SOIL. Deep fat ſandy loam is perhaps the only ſoil, on which it is here cultivated with advantage.

OLD GRASS LAND, bearing this deſcription, is conſidered as the propereſt matrix for line. It is not unfrequently, however, ſown on ARABLE LAND; and, when the ſoil is in heart,

dry, friable, and free from weeds, with good ſucceſs.

III. TILLAGE and MANURE. The SOIL PROCESS generally conſiſts of a *ſingle plowing*, whether of ſward or of wheat ſtubble.

In the latter caſe, however, it is moſtly bad management. If line be ſown on *old corn-land*, it ought, in general, to be *cleaned from weeds*, and rendered *perfectly friable*, by a well worked FALLOW.

MANURE is, I believe, ſeldom, if ever, ſet on, immediately for the line crop.

IV. SEMINATION. 1. The TIME OF SOWING, May. 2. The PREPARATION OF THE SOIL. Much depends on the ſtate of the ſoil at the time of ſowing. It ſhould neither be very wet nor dry; and the ſurface ought to be made as fine as that of a garden bed. Not a clod the ſize of an egg ſhould be left unbroken. 3. QUANTITY OF SEED, two buſhels an acre. 4. COVERING THE SEED. Sometimes, the ſurface is raked (after being firſt harrowed) with garden or hay rakes. If, at the ſame time, the clods and other obſtructions, which could not eaſily be reduced, were drawn into the interfurrows, the operation would be ſtill more complete.

A light

A light hand roller, uſed between the final harrowing and the raking, would aſſiſt much in this intention.

V. The VEGETATING PROCESS depends, chiefly, on careful WEEDING; an operation which ought to be performed, with great ſcrupulouſneſs. Hence, land which is ſown with flax ſhould be made as free from weeds as poſſible; otherwiſe, the expence of weeding, or the injury to the crop, becomes conſiderable.

If, through a *droughty ſeaſon*, the plants come up in *two crops*; or if, by any other accident, or by miſmanagement, the plants be *too thin* upon the ground, the crop is irreparably injured.

The nature of flax is ſuch, that where it has room at the root, or whenever it gets its head above the plants which ſurround it, it ſends out *ſide branches*, and loſes, in a great meaſure, its *upward tendency*. But its goodneſs, as a crop, depends on its running up, with *one ſingle ſtalk*, from the root to the ſeed. *At whatever height it ramifies, there the length of line terminates.* The branches are neceſſarily worked off in dreſſing; and the ſtem itſelf, unleſs it bear a due proportion to the

bulk of the crop, is likewiſe worked out among the refuſe.

Hence, the neceſſity of having an EVEN, FULL CROP. Clods, before the ſowing, by making the ſeeds glance in falling, prevent the ſurface from being evenly ſeeded; and thoſe which remain, when the ſeeds are in the ground, prevent them from riſing regularly. The infant plants, unable to pierce the clod, form themſelves in a circle round it, leaving a vacancy in the center, favorable to their early ramification.

This being the nature of the plant, a *ſecond coming up* ſeldom riſes to profit; for, being overgrown by the ſpreading plants of the firſt crop, it remains weak, ſhort, and underling, and, at pulling-time, is left ſtanding upon the land. Thus, by a droughty ſeedtime, the entire crop may be ſpoiled.

Nor is drought the only enemy of flax: it is liable to injury from *ſpring froſts*; and is ſometimes attacked, even when it is five or ſix inches high, by ſmall white *ſlugs*; frequently ſtripping off the leaves to the top, which, bending down with their weight, they will ſometimes draw into the ground; thus in part checking, and in part deſtroying the plants.

If,

If, at the time of weeding, a piece of flax do not *promiſe fair for a crop*, it is always bad management to beſtow upon it further labor and expence. A crop of turneps, or of rape will generally pay much better, than ſuch a crop of flax.

VI. MANAGEMENT OF THE PRODUCE. 1. The TIME OF HARVEST, in this climature, is generally the latter end of July, or the beginning of Auguſt.

2. CRITERIA OF RIPENESS. If the crop be intended for line of the firſt quality, the time of pulling is when the ſeeds are fully *formed*, but not yet ripe. If the *ſeed* be ſuffered to *mature*, the quality of the flax is lowered; the filaments are harſh, and the cloth, made from them, will not take a good color in whitening.

3. The "PULLING" is done by laying hold of the full-ſized plants, near the top, and drawing them up, or rather breaking them off, by the roots. One hand is uſed in pulling, while the other receives the handfuls; until as much is collected, as both hands can graſp. Some ſhort underling plants are then gathered for a band, with which a ſheaflet is formed.

4. Theſe ſheaflets are collected into heaps, and immediately taken to the WATERING PIT, in which they are completely immerged; firſt by treading, and afterwards by loading them with ſods, or other heavy materials.

The immerſion is, or ought to be, carefully attended to; for that which happens to be expoſed, above the ſurface of the water, is materially injured.

The "ſteeping" is continued a longer or ſhorter time, according to the weather and other circumſtances. It ought to lie, until it be ſufficiently tender, without being rotten; but to catch this ſtate requires a nicety of judgement, which can be learnt from practice, only. It generally lies about ten days in ſteep; ſometimes a fortnight.

5. From the "line pit" it is carried to the "RATING GROUND;"—a piece of unbroken aftergraſs, where the ſheaflets are untied, and the flax ſpread thin upon the graſs. It is calculated, that a full crop ought to cover as much ground as it grew upon. Here it lies until it be ſufficiently "rated;" namely, until the more woodlike ſubſtance of the ſtems will ſeparate, freely, from the filaments or flaxen fibres, while theſe remain yet untainted; therefore the length of time of rating, like that

that of ſteeping, depends much on the weather, and can be aſcertained, only, by the daily obſervation of a perſon, whoſe judgement has been matured, by long experience.

If, when it reaches this ſtate, the weather be ſuch, that it will not dry, as it lies upon the graſs, it is ſet upon its butts, in parcels reſembling ſugar loaves, or large untied gaits. When dry, it is laid up, in a barn, or other convenient place, to be "ſwingled," when leiſure and conveniency will permit.

6. The "SWINGLING"—(and, generally, the "ſteeping" and the "rating")—is done by men who make a buſineſs of it; travelling from place to place, wherever flax is under cultivation.

The operation of ſwingling is that of ſeparating the woody ſubſtance from the filaments. To effect this, the rough ſtubborn ſtems are mangled in a "break;" an inſtrument which breaks the brittle ſubſtance of the ſtem — provincially, the "bun"—into fragments, without ſeparating them from the filaments. The ſeparation is effected by beating, or rather *bewing* the mangled ſtems againſt a "ſwingling ſtock"— (an upright ſtout board or ſlab) with a "ſwingle hand" —or wooden broad-axe; the ſwingler, from

time to time, drawing out the tow, or ſhort broken filaments, by means of a "foot-heckle"—(reſembling the tools of the flax-dreſſers);—and thus uſing, alternately, the ſwingle-hand and the heckle, proceeds, until the line be rendered fit for the flax-dreſſer; namely, until the principal part of the fragments—provincially, "ſhivs" or ſhivers,—and the principal part of the tow or ſhort filaments, be extricated; when the flax is folded up into bundles for ſale.

The ſwingling is done, by the ſtone, at a price proportioned to the length and ſtubbornneſs of the crop. Flax, which is ſhort or tough, requires much more labor, than that which is longer, or from which the ſhivers part freely. From eighteenpence to two ſhillings, a ſtone, with board and lodging, is given for ſwingling: about twentypence is the common price. The work is very laborious.

VII. MARKETS. A manufactory of coarſe linen being carried on in the Vale, a market is always at hand. The price of rough flax varies, with foreign markets, and its intrinſic quality. Seven to eight ſhillings a ſtone (of fourteen pounds) may, I believe, be

be conſidered as a medium price. From thirty to forty ſtones, an acre, a middling crop.

General Observations on Flax as a Crop, in England.

From this ſketch of the culture and management of flax, it appears, that the goodneſs of the crop depends in ſome meaſure upon its *length*; and this upon its *evenneſs* and *cloſeneſs upon the ground*. The ſtems ſhould be *tall*, *ſtraight*, and *ſlender*. Three feet high is a good length of ſtem; and the thickneſs of a crow quill a good thickneſs. A fine ſtalk affords more line, and fewer ſhivers, than a thick one does. A *tall*, *thickſet crop* is therefore deſirable.

But, unleſs the LAND BE GOOD, a *thick* crop cannot attain a ſufficient *length* of ſtem. Hence, the folly of ſowing flax, on land that is unfit for it.

Nevertheleſs, with a SUITABLE SOIL, a *ſufficiency of ſeed*, *evenly diſtributed*, and a *favorable ſeaſon*, flax may turn out a very profitable crop.

The flax crop, however, has its DISADVANTAGES: it interferes with harveſt, and is generally believed to be a great exhauſter of

of the ſoil, eſpecially when its ſeed is ſuffered to mature *.

Hence, its cultivation, *on a large ſcale*, ought to be confined to RICH GRASSLAND DISTRICTS, where harveſt is a ſecondary object, and where its exhauſtion may be rather favorable, than hurtful, to *ſucceeding arable crops*; by checking the too great rankneſs of rich, freſh-broken ground.

It is alſo evident, from the foregoing outline, that much judgement is requiſite to the right-ordering of flax. No man, therefore, ought to attempt its cultivation, on a large ſcale, until he has himſelf ſtudied the various proceſſes, maturely, in a Diſtrict where it is cultivated, or has procured, from ſuch a country, a perſon who is enured to them, by long practice.

But no prudent man will put himſelf to either of theſe inconveniencies, before he has tried, by ſmall EXPERIMENTS, whether his SOIL be ſufficiently AFFECTED BY FLAX, to enſure, under proper management, and a good ſeaſon, a moral certainty of a CROP.

* In this caſe, the ſheaflets are ſet up in ſtooks, in the field, and, when dry, are carried to the barn, thraſhed, rated, ſent to the watering pit, and treated as prime flax.

24.

TOBACCO.

SOME YEARS ago (moſtly in the year 1782) large patches of tobacco, together amounting to many acres, were grown, in this Vale: and, in the Vale of York, a ſtill greater quantity was cultivated.

In this Diſtrict, it did not excite the notice of legal authority: in the richer parts of the Vale, where the greateſt quantity was raiſed, it was cured, and manufactured, by a man who had formerly been employed, upon the tobacco plantations of America; and who not only cured it properly, but gave it the proper cut, and finally prepared it for the pipe and pouch.

But, in the Vale of York, the cultivators of it met with leſs favorable circumſtances. Their tobacco was publicly burnt, and themſelves ſeverely fined, and impriſoned. Penalties, it was ſaid, were laid to the amount of thirty thouſand pounds *.

This

* The penalty, I believe, is 10l. a rod, or 1600l. an acre!

This was enough to put a ſtop to the *illegal* cultivation of tobacco. But, perhaps rather unfortunately, it has likewiſe put a ſtop to the cultivation of that *limited quantity*, which the *law allows* to be planted, for the purpoſes of "phyſic and chirurgy."

The quantity of land allowed to be cultivated for theſe purpoſes is, I believe, HALF A ROD, which is full FIFTEEN SQUARE YARDS of ground; a patch of ground ſufficient, under proper management, to raiſe tobacco enough, for all the *medical* purpoſes of a farm houſe; in which it is, on many occaſions, uſeful. In cutaneous diſorders of cattle and ſheep, it is univerſally applied.

I will, therefore, juſt ſet down ſuch particulars, reſpecting its cultivation in this neighbourhood, as I collected in the autumn of 1782. I had not an opportunity of ſeeing the plants on the ground.

The SPECIES was probably NICOTIANA *ruſtica*, the ENGLISH TOBACCO; ſo called from the circumſtance of its being the firſt ſpecies cultivated in England.

The *ſeeds* were procured at the ſeed ſhops, and handed about, from one cultivator to another.

The

The *ſeed-bed*, as rich and fine as poſſible.

The *time of ſowing*, as ſoon as the weather became warm enough, to make it vegetate: moſtly, in April.

When the ſeedling plants were ſtrong enough to bear removing, they were *tranſplanted* from the ſeed-bed, to the patch on which they were intended to ſtand.

In the practice of one, they were planted out in the *quincunx* manner, a foot aſunder: in that of another, in *rows*, two feet apart, and one foot aſunder in the rows.

In both caſes, they were carefully *hoed*, and kept free from weeds, during the ſummer.

In autumn, when the flowers began to drop off, they were *cut* and *dried in the ſhade*.

When dry, the leaves were *picked off*, and *preſſed down cloſe*, in caſks or other veſſels.

The ſpring of 1782 being late, the plants did not, upon weak ſoils, reach maturity before the froſts began to ſet in. Hence, a rich forcing ſoil ſeems to be neceſſary to the culture of tobacco, in this climate.

The vegetation, however, may be greatly forwarded, by forcing the ſeedling plants, in a ſtove or hotbed, and tranſplanting them out, as ſoon as the froſts of ſpring are over.

CUL-

25.

CULTIVATED HERBAGE.

THE SPECIES of HERBAGE, cultivated in this Diſtrict, for the purpoſes of hay and paſturage, are,

Clover—*trifolium pratenſe*—red clover *.

White clover—*trifolium repens*—white clover †.

Trefoil—*medicago lupulina*—yellow clover, or trefoil, or nonſuch.

Ryegraſs—*lolium perenne*—raygraſs.

Hay-ſeeds—*holcus lanatus*—ſoftgraſs.

Rib-graſs—*plantago lanceolata*—plantain.

Cinquefoil—*hedyſarum onobryckis*—ſainfoin.

Theſe ſpecies are cultivated, ſeparately, or mixed, as ſoils and circumſtances point out. The DURATION of the intended ley is the firſt

* RED CLOVER; a *cultivated variety* of the MEADOW TREFOIL. See NAT. HERBAGE.

† WHITE CLOVER; a *cultivated variety* of the CREEPING TREFOIL.

firſt thing conſidered; therefore, the principal diviſion of the ſubject is into

I. Temporary leys.
II. Perennial leys.
III. Sainfoin ley.

I. TEMPORARY LEYS. The *annual* ley, which is now common in moſt parts of the kingdom, and the *biennial* ley, which is prevalent in Norfolk, are almoſt equally ſtrangers in this Diſtrict.

Fallowing for wheat is ſtill a common practice, here. Clover ſtubbles are ſeldom uſed as matrices for that crop. An ill-grounded notion prevails, that wheat after clover breeds quicks!

If land be ſtocked with couch, when the clover is ſown, the ſucceeding wheat crop, no doubt, by occupying the ſoil ſo long with only a ſingle plowing, increaſes the quantity. There is no worſe management than ſowing wheat on a *foul* clover ley; but this is no argument againſt ANNUAL LEYS. If the land be clean, when the clover ſeed is ſown, it will as ſoon breed ſugar canes as quicks.

In a graſs land country, however, clover leys are leſs wanted than tillage; and, in the cooler better-ſoiled parts of the Vale, they may, perhaps, without much impropriety, be diſpenſed

diſpenſed with. But, on the drier thin-ſoiled lands, which lie upon the marginal heights, temporary leys would be found far preferable, to the unproductive "meadows," which now occupy a conſiderable part of their ſurface. The Norfolk ſyſtem of huſbandry appears, to me, to be ſingularly well adapted to the lands of the "high towns;" the more productive parts of which ought not, in my opinion, to be permitted to bear more than two crops of grain, nor two crops of graſs, ſucceſſively.

II. MIXED PERENNIAL LEYS. Formerly, in this as in other Diſtricts, arable land was laid to graſs, by the mere ceſſation of plowing. When land refuſed to produce corn any longer, it was permitted to lie down to *reſt*; or, in other words, to lie waſte. For ſeveral years, it produced nothing but weeds; and theſe, of courſe, of the leaneſt kind. The wild birds were its only occupiers. At length, however, the graſſes, by ſome myſterious proceſs of nature, would begin to make their appearance. But their progreſs was ſlow: it was twenty years, perhaps, before a full crop of them was produced.

Before the cultivation of graſſes was known, in this Iſland, ſuch barbarous management

ment was excuſable; but how this and other counties could continue it, more than half a century, after the cultivation of them was fully eſtabliſhed, in a county not far diſtant from them (Norfolk), is a matter of ſome aſtoniſhment. Thirty years ago, the cultivated graſſes were ſtrangers in the Vale. The production of perennial leys was left wholly to nature; and, even yet, there are ſome *few* individuals, who remain bigots to Nature's practice.

It is, no doubt, a fact, as notorious as it is intereſting, that all the charming old graſs lands, with which *this* neighbourhood at preſent abounds, are of NATURE'S LEYING. For richneſs and variety of herbage (as will appear in the next ſection) it is no where, perhaps, exceeded. It is alſo notorious, that there has been very little, if any, well herbaged meadow produced, in this Diſtrict, through the means of *artificial graſſes*.

Striking, however, as theſe facts may be, they only afford matter of argument, do not bring proof, againſt the CULTIVATION of PERENNIAL LEYS.

If a ſoil already *exhauſted by corn crops*, and *foul through a want of tillage*, be rendered ſtill fouler, by having the *ſeeds of weeds* under

the denomination of "hay-ſeeds," *ſown* over it; and if, added to this, the weedy crop, which ſuch management muſt neceſſarily afford, be *mown*, year after year, and the produce *carried off*, it is no wonder that the ſward, inſtead of improving by age, ſhould annually go off, and that the ſoil, at length, ſhould require to be given up again to the plow.

On the contrary, if a ſoil, naturally ſuited to graſs, in good heart, and thoroughly cleanſed, be ſown with the ſeeds of herbage ſuitable to its nature, and free from the ſeeds of weeds; and if, for a few years, the young ley be paſtured, during the ſpring months, and the weeds and broken graſs be ſwept down with the ſithe, after Midſummer, a well herbaged durable ley may, on a certainty, be produced, and this without *one* year's crop being loſt.

The DURATION of good herbage, however, depends much on the *nature* of the SOIL, and much alſo on the *ſtate* in which it has been kept. Land which has been kept in TILLAGE, for centuries, is peculiarly affected by the graſſes, which, under ſuch circumſtances, will flouriſh for a length of time; even on ſoils that are not peculiarly adapted

adapted to them. Some of the graſs lands of this neighbourhood are now growing toward a century old; yet, notwithſtanding they are generally mown, year after year, without intermiſſion, they are ſtill in a flouriſhing ſtate: not, however, I apprehend, entirely owing to the method in which they were leyed, but to the land having previouſly been long in a STATE OF ARATION.

Nevertheleſs, I am of opinion, that the *variety* and *cloſeneſs* of the herbage under notice ariſes, in ſome meaſure, from the METHOD OF LEYING. But taking this for granted, and admitting that the produce is ſomewhat improved, or increaſed, by an endleſs variety, and an extreme cloſeneſs, of herbage, no man, without the pale of dotage, can conſider this advantage, as a full compenſation, for the loſs of, at leaſt, *ten* years' crops.

Of late years, the art of leying land to graſs has, in this Diſtrict, made rapid ſtrides toward perfection.

In the CHOICE OF HERBAGE, judicious huſbandmen are guided by the *nature of the ſoil* to be ſwarded. On the ſouthern heights, where the ſoil and ſubſoil are calcareous, SAINFOIN is cultivated, as a perennial ley.

In the Vale, where the ſoils are non-calcareous, a MIXTURE of graſſes are cultivated for that purpoſe.

Formerly, "HAYSEEDS" were in high eſtimation, and they have ſtill ſome few advocates left. They conſiſt either of a collection of graſſes and weeds, as collected from the hay-loft, or a leſs foul ſelection of the MEADOW SOFT GRASS; which is cultivated, ſeparately, and thraſhed, as corn, for its ſeeds.

But this is far from being an eligible graſs for cultivation, and is now entirely exploded by judicious huſbandmen; among whom RAYGRASS has, at length, grown into due eſtimation; and has very properly ſupplanted, in their eſteem, the whole tribe of hayſeeds*.

RAYGRASS, nevertheleſs, has ſtill its enemies. But they are either men who are unacquainted with it, or who have been unfortunate in their experience.

If the ſeeds be foul (as is too generally the caſe) the herbage will of courſe be of a bad quality. If it be ſuffered to run up, in the ſpring, before ſtock be turned upon it, much of

* The growers of the ſeeds of the ſoft graſs are the only perſons who have profited by its cultivation. Eighty buſhels an acre have been produced.

of it will, no doubt, be left uneaten. If suffered to stand too long, before it be mown, its hay will, of course, be ordinary. Under bad management, even the wheat crop is unprofitable. But will any man bring this as an argument against the intrinsic quality of wheat, or against its being proper to be cultivated, in soils and situations to which it is adapted?

The seeds of ray grass should be *winnowed*, and freed from the seeds of weeds, with the same scrupulousness, that is bestowed on the seed of wheat, or other grain.

If raygrass be intended for PASTURAGE, it ought to be eaten, as *early in spring*, as the land will bear stock; which ought to be so proportioned, that it never be suffered to rise above a moderate bite.

If it be shut up for HAY, it ought to be mown, as soon as the seed-stems are fully formed; *before the flowers come out*.

If it be intended for SEED, it ought to stand until *the flowers be fully blown*. But it must not be expected, in this case, that the *straw* will prove *hay*. Who ever expected *hay* from oats or barley, *which stood to mature the seed?*

As a *ſpring* food, RAYGRASS is indiſputably preferable to every other graſs; and, in *autumn*, it renews its nutritious bite. This property, added to its productiveneſs, and to the facility with which its ſeeds may be collected in quantity, give it a decided preeminence to every other bladegraſs, at preſent known, in theſe kingdoms.

But raygraſs, like other early graſſes, remains in a great meaſure unproductive, during the *ſummer* months. This renders it improper to be ſown *alone*, for PASTURAGE.

WHITE CLOVER, or other *ſummer herbage*, is requiſite to be cultivated with it.

All perhaps that is wanted, in addition to theſe, in order to render the buſineſs of cultivating perennial leys as nearly perfect as common practice may require, is one or more SUMMER BLADE GRASSES, of a nutritious quality and productive growth, and whoſe ſeeds may be eaſily collected, ſeparately, from the ſeeds of weeds.

The MEADOW or TALL FESCUE (FESTUCA *elatior*) is moſt likely to anſwer the purpoſe.

The MEADOW POE (POA *pratenſis*) has ſome properties which recommend it ſtrongly; but its ſeeds are not eaſily ſeparable. Nevertheleſs,

theleſs, it might be worth ſome pains to cultivate this graſs. It is ſtrictly a *ſummer* graſs. It blows ſufficiently late, and bears drought with uncommon hardineſs. I have ſeen it flouriſh, on a wall, throughout ſummer. And during the drought of 1786, Mr. Curtis's botanic garden afforded a ſtriking inſtance of its nature, in this reſpect: it remained green, and in growth, while its neighbours were moſt of them ſcorched up with drought.

This Diſtrict has adopted the NARROW-LEAVED PLANTAIN, as ſummer herbage. As an article of *paſturage*, for cattle and ſheep, it is in high eſteem: it is not, however, well affected by horſes; and, as an article of *hay*, it is detrimental to the crop; retaining its ſap an unuſual length of time; and, when fully dry, falls into a ſmall compaſs, or is broken into fragments, and left behind in the field. An advantage of this plant is, that its ſeeds may be eaſily procured, in an unadulterated ſtate. A ſmall proportion of it may be eligible: it has now ſtood the teſt of twenty years eſtabliſhed practice, and ſeems to be ſtill in good eſtimation; even among obſervant huſbandmen.

THE MIXTURE OF SEEDS for a perennial ley varies, in this Diſtrict, with the ſpirit and

judgement of the occupier. Some make choice of the cheapeſt, and imagine a ſmall quantity to be ſufficient: while others chooſe thoſe which are moſt ſuitable to their reſpective ſoils, and think they cannot throw on too many.

The moſt promiſing young perennial ley which I have ſeen, in the Vale, and which is in the occupation of one of the largeſt and beſt farmers in it, was ſeeded with the following ſeeds, and proportions, an acre: namely, fourteen pounds of WHITE CLOVER; and fourteen pounds of RED CLOVER, TREFOIL, RIBGRASS, and RAYGRASS, mixed in equal proportion of weight.

But the more general mixture is fourteen pounds of RED CLOVER, WHITE CLOVER, TREFOIL and RIBGRASS, mixed in equal quantities; with a buſhel or two of RAY GRASS, ſown ſeparately.

This, however, is an unneceſſary quantity of RAYGRASS; a gallon to a peck, an acre, of clean *winnowed* ſeed, appears in the above inſtance, as well as in the Norfolk practice, to be abundantly ſufficient.

The AFTER MANAGEMENT of perennial leys is, in the ordinary practice of this Diſtrict,

trict, as it is in that of moſt other places, extremely injudicious.

General Remarks on Leying, and Breaking up Old Ley Grounds.

Letting the land lie, eight or ten years, in worſe than a ſtate of waſte is very little wider from the line of right management, than mowing a young perennial ley, every year, and carrying off the produce. They are two extremes which ought to be equally avoided. One of them is giving up preſent profit, entirely, for future advantage: the other, regardleſs of future advantage, is graſping at preſent profit.

In tenants at will, without confidence in their landlords, there may be ſome excuſe for ſuch management. But they are not, perhaps, aware that, by ſuch conduct, they are deſtroying that confidence which landlords ought to have in their tenants: thereby militating againſt themſelves and their profeſſion.

Landed gentlemen, in general, are tenacious of their old graſsland; and with good reaſon, even though it might, for a time, be worth thrice the value in a ſtate of aration.

An

An inſtance occurs in this neighbourhood, in which a piece of old graſsland, broken up to arable, has thrown out its purchaſe value, as graſsland at the time of breaking up, in the firſt three crops.

All ſward, unleſs the ſoil be ſingularly good, the management extraordinary, and the manurings frequent, will in time become unproductive. Even the ſward of well ſoiled commons, off which no produce has been taken, is, when incloſed, found weak and unprofitable.

Nevertheleſs, it may be more prudent, in men of landed eſtates, to hand down their old graſsland, to their ſucceſſors, in the ſtate in which it is, than to permit it to be broken up and reduced, by improper treatment, to a ſtate ſtill leſs valuable. And were there no means of avoiding the evils of improper management, in tenants, landlords would be fully warranted in a rigid refuſal of their requeſts, to break up ſuch graſs-lands, though they were unproductive and unprofitable.

But in the management of an eſtate, GRASS LANDS and HEDGES ſtand in nearly the ſame predicament. It is the tenant's intereſt to *injure* them; and the landlord's buſineſs, of courſe, to look to their *preſervation*.

If,

If, on a farm, already *in due proportion*, as to GRASSLAND and ARABLE, the tenant requeſt to break up a piece of unproductive ſward, it might be ſaid to be a *duty* which the landlord owes, to the community at large, to grant his requeſt. But it is, at the ſame time, a *duty* which he owes, to himſelf, and his ſucceſſors, to oblige him to lay down to graſs an equivalent of arable land. Not, however, a piece which has been exhauſted and rendered foul by a ſucceſſion of corn crops; but one which is in heart, and has been duly cleaned by a *whole year's fallow*. Not, however, by ſowing it with foul ſeeds, or an improper aſſortment; but (where due confidence cannot be placed in the tenant) with *clean ſeeds*, furniſhed by the landlord, at the tenant's expence.

The after management calls equally aloud for the landlord's attention. If he voluntarily ſuffer it to be eaten with ſheep, or to be poached with other ſtock, the firſt winter; if he ſuffer the tender bottom graſſes to be ſmothered, in their infant ſtate, by the taller herbage running up for hay, or the ſoil to be exhauſted, by carrying off a crop during the firſt three years; or if he permit it, under ordinary circumſtances, to be afterwards mown

(except

(except ſweeping off the weeds and broken graſs after Midſummer) oftener than every ſecond year;—he is doing injuſtice, to himſelf and the community.

It muſt be underſtood, however, that the management here recommended is applicable only to *perennial* leys of twenty, fifty, or a greater number of years: not to *temporary* leys of one, two, or even five or ſix years. In this caſe, herbage becomes an ARABLE CROP, and calls for no other attention than that which the ordinary management of an eſtate requires.

III. SAINFOIN LEY. This is a perennial ley; in the making of which both landlord and tenant are generally intereſted.

The Diſtrict under ſurvey is ſingularly favorable to the ſtudy of ſites fit for the culture of ſainfoin. In ſome parts of it, it is cultivated with great profit. In others, its culture has been repeatedly attempted, without ſucceſs.

The fineſt ſainfoin, I have ſeen, grows in the immediate neighbourhood of MALTON. Three tons of hay, an acre, are ſaid to have been cut. I have ſeen crops, which, to appearance, would not afford leſs.

The *ſoil* a dry calcareous loam, from ten to twenty inches deep. The *ſubſoil* a calcareous rubble,

rubble, from two to three feet deep; lying on an unfathomed rock of ſoft limeſtone. (See Art. MANURE.)

One hundred grains of the cultivated *ſurface ſoil* of "Peaſy Hill" affords twentyfive grains of calcareous matter.

One hundred grains of the earthy part of the *ſubſoil*, among which the plants of ſainfoin, in all probability, principally feed, contain fiftynine grains of calcareous earth *.

The analyſis of the *rock* appears in Vol. I. page 315.

About BROMPTON, in the northeaſt quarter of the Vale, good ſainfoin is grown; but, I believe, in no way comparable with that of Malton.

* It has been conceived that ſainfoin feeds on the ſtones themſelves; not on the ſoil which is mixt among them, or which covers them; and this has ſerved to account for the ſuperiority of the ſainfoin of Malton. But it ſeems much better adapted to the nature of plants to feed among ſoil, than in ſtones; eſpecially when the ſoil is of a nature ſimilar to that of the ſtones which mix among it. The lower part of the ſubſoil, which forms the upper part of the rock, is compoſed of ſmall ſtones mixed with an efflorescent mold, formed in the interſtices of the ſtones, which mold is *almoſt wholly calcareous*; ſo that the plants, in this caſe, have a ſufficiency of calcareous matter to paſture among, without feeding upon the ſtones; which, though *ſoft*, cannot, in this caſe, be ſaid to be *porous*.

The

The *soil* is a lightish loam; good turnep and barley land; varying in depth.

The *subsoil*, a calcareous loam; mixt with limestone, or with redstone, gravel; and lying on a limestone, or on a redstone rock. In either case, the land is productive of sainfoin; in proportion, it is said, to the depth of the soil; that is, the depth between the surface of the soil and the rock; lasting twenty years, more or less, according to the depth of the land.

One hundred grains of the *natural soil* (taken from the side of the lane between Brompton and Sawdon) yields three grains of calcareous matter.

One hundred grains of the *subsoil* of an adjoining inclosure, taken from the top of a loose mixt-stone rock, at about eighteen inches deep, affords fourteen grains of calcareous earth.

The *limestone* is of a nature between that of Malton and that of Pickering (See Art. MANURE), namely a calcareous granite of a middle quality, as to hardness.

The *redstone* is of a singular nature, being intermixed with calcareous globules, or round grains, exactly resembling those of the softest of the Malton limestone. One hundred grains

of

of this *redſtone*, collected among the *ſoil* above analized, yields thirteen grains of calcareous matter. The ſtone in this caſe porous; ſufficiently open for the fibrils of plants to inſinuate themſelves.

In the neighbourhood of PICKERING, ſainfoin has been repeatedly tried; but, I believe, without one inſtance of tolerable ſucceſs. The plants, I underſtand, roſe very well from the ſeed; but never got up to a crop; and in a ſhort time diſappeared.

On examining a piece of limeſtone land, which was ſown with ſainfoin, by my father, ſome fifty or ſixty years ago, I find, in one particular part of it, a few plants ſtill ſurviving.

To aſcertain the nature of the paſturage, which could give ſuch unuſual longevity to theſe plants (ſuppoſing them to be remains of the originally cultivated roots), I dug down by the ſide of two plants, which grew within a few inches of each other: one of them remarkably healthy, though not luxuriant; the other, a declining plant; half of its top decayed.

The roots ſtruck downward, perpendicularly, and parallel to each other; throwing out a few ſlender ſide rootlets.

Near

Near the ſurface, they were accompanied with the roots of the burnet, and of the burnet roſe (ſee the next ſection); neither of which reached more than two feet deep.

At the depth of three feet, the root of the decaying plant had rotted off; having nothing but the fibrils, above, left to ſupport it.

At four feet, the vigorous plant reached the top of the rock; or rather, the looſe ſtones which lie upon the rock.

The fields of paſture of this plant were evident. The root was ſimply a thong, reaching from top to bottom; tapering from the ſize of a reed to that of a crow-quill. The fibrils on the ſide were fine as hair; except at about two feet deep, where ſome thread-like rootlets were thrown out, into a thin layer of ſomewhat paliſh-colored clay; and except at about three feet and a half deep, a ſimilar ramification had been made, in a ſimilar but paler-colored earth. At four feet, a general ramification had taken place; the main root there ſeparating into large branches; ſtriking nearly horizontally; not upon the top of a hard impenetrable rock (though upon a ſtone of about ſix inches over) but in a ſtratum of ſtill paler clay; ſome three or four inches thick: a proof that it had here met

met with a ſoil ſuitable to its nature; only one of its rootlets (not thicker than a ſtem of raygraſs) having attempted to go lower.

In teſting the ſeveral ſtrata, I find, that the three ſeams of clay, alone, diſcover ſymptoms of calcareoſity. Neither the topſoil, nor any of the intervening ſtrata, appear to contain any thing of a calcareous nature; excepting ſome fragments of clean, hard limeſtone, which mix, more or leſs, with the whole.

One hundred grains, of the uppermoſt ſeam of clay, yield ſeven grains and a half of calcareous matter: one hundred of the middlemoſt, twentythree and a half grains: one hundred of the loweſt ſtratum, the main field of paſturage, twentynine grains.

From the ſum of this evidence, and from every part of it, it appears, demonſtrably, that SAINFOIN delights in CALCAREOUS EARTH. And we may almoſt infer, with equal certainty, that it will not *flouriſh* in a ſituation, where both the ſoil and the ſubſtrata are deſtitute of calcareoſity.

In another part of the field, laſt under notice, the rock riſes to within ten inches of the ſurface; terminating in flat *clean* ſtones, without any admixture of mold or efflorescent matter; and the ſoil perfectly uncalca-

reous. Here, not a ſingle plant of ſainfoin is to be detected. The plants, probably, did not ſurvive the firſt year.

Much of the limeſtone land, above Pickering, is of a ſimilar nature. This accounts for the miſcarriages which have taken place.

Neverthelefs, the tops of ſome of the limeſtone quarries (as the Caſtle Bank) terminate in looſe ſtones, mixt with grey efflorefcent mold, and have fiſſures containing efflorefcent matter, which, I find, is purely calcareous. Among theſe, ſainfoin no doubt would flouriſh. There may be conſiderable patches of this land; and they appear to me to be well worth ſearching for. To throw away ſeed, and perhaps two or three years crops, merely on ſuppoſition, is highly imprudent. But a few hours, or a few days, expended in the ſearch of a proper ſoil, might be time well employed.

The great ADVANTAGE OF SAINFOIN, and that which diſtinguiſhes it, in a ſtriking manner, from *all other crops*, is that of its feeding, principally, *below the field of ordinary vegetation*; bringing up, to the ſurface, vegetable matter, which, without it, would for ever have lain uſeleſs to agriculture; and enriching the cultivator, with treaſures, which,

with-

without its aſſiſtance, might as well have been ſituated at the earth's center *. While he is annually reaping a crop of the moſt nutritious herbage, agriculture is at preſent acquainted with, his ſoil, ſo far from being exhauſted, is, in all probability, gathering ſtrength, to enable it to throw out, in future, a ſucceſſion of *arable crops:* beſides the additional advantage, ariſing from the quantity of *manure*, which he has been extracting from the bowels of the earth, by twenty or thirty crops of ſainfoin.

26.

NATURAL HERBAGE.

General View of the Subject.

In a Diſtrict where permanent graſs lands prevail, and where arable crops may be conſidered as ſecondary or ſubordinate to this main object of its huſbandry, GRASS LANDS

* On the Malton ſide of the Vale, the roots of ſainfoin have been traced to the depth of twelve or fourteen feet. I have ſeen roots, which, near the ſurface, have been as thick as an ordinary walking-cane.

AND THEIR MANAGEMENT are entitled to particular attention; and, in a regiſter of the Rural Economy of ſuch a Diſtrict, they require a minute detail, and a perſpicuous arrangement.

This important branch of agriculture, as it is practiſed in the Diſtrict under ſurvey, aptly ſeparates into the following ſubdiviſions:

I. The Species of permanent Graſs Lands in this Diſtrict.

II. Their General Management; or the operations common to the ſeveral ſpecies, and to the ſeveral purpoſes to which they are applied.

III. The particular Management of Hay Grounds.

IV. The Management of Paſture Grounds.

I. The SPECIES or variety of graſs lands muſt be in ſome meaſure indefinite, in a Diſtrict where the ſoil varies, from the coldeſt clay to the moſt fertile loam, and from this to the moſt barren ſand in the bleakeſt ſituation; and where natural herbage abounds, indiſcriminately, on every ſoil, and in every ſituation.

Nevertheleſs, in *this* quarter of the Vale under ſurvey, they may be reduced to three CLASSES, namely,

1. Low-

1. Lowland Graſs.
2. Upper Graſs-Grounds.
3. Upland Graſs.

1. LOWLAND GRASS. The *ſituation* of the graſs lands that fall under this denomination, is in the low flat parts of the area of the Vale. In a ſtate of nature, they were doubtleſs covered with water, the whole, or a principal part, of the year; and ſome of them are ſtill (or were until very lately) liable to be overflowed, in times of floods.

The *ſoil* of theſe lands varies. Part of them are of a looſe loamy texture; but, more generally, they are of a cloſe firm clayey nature; ſuch as we frequently find where large bodies of water have been accuſtomed to lie. In ſome places, eſpecially on their upper margins, the clay is covered with a ſtratum of black vegetable mold; generated, probably, by the overflowings of ſpring, while the land lay in a neglected ſtate; before ſhores and ditches were opened.

The *herbage* varies with the ſtate of occupancy, to which they have been ſubjected, during, perhaps, a millennium of time; namely, ever ſince the firſt laying out of the townſhip. It is certain, at leaſt, that, time immemorial, and beyond all tradition or record,

part of them have been kept in a ſtate of COMMON PASTURE,—provincially CAR,—a term analogous with *marſh* or *fen*, or the *meadow* of Norfolk,—namely, *perennial paſture ground*; the other have been as conſtantly kept in a ſtate of COMMON MOWING GROUND,—provincially ING,—a term ſynonimous with *meadow*, as uſed in moſt Diſtricts,—namely, *perennial mowing ground*.

Theſe ing lands, or ings, as they are uſually called, differ from the common meadows of Gloceſterſhire, and other counties, in the manner of diſtribution; the ſhares lying, not in ſquare plots, but in SWATHS, about nine feet wide, and of half a mile, perhaps, in length; and moſtly in *pairs*; without any other boundaries, than what have been given by conſtant mowing; each ſwath being hollow in the middle, and riſing to a ridge, on either ſide.

Some of this ingland ſtill remains open; parts of it have been, from time to time, incloſed.

The HERBAGE of the LOWLANDS OF PICKERING conſiſts, chiefly, of the following plants; which I have *endeavored* to place, according to their frequency, in the OPEN

INGS

INGS of this townſhip. Some of thoſe, in the lower part of the liſt, may not be prevalent, in theſe open mowing grounds; but are common on the ſame ſoil, and in a ſimilar ſituation, where the land is incloſed, and may have been paſtured, and improved by draining, &c. *but has never been plowed.*

Provincial. *Linnean.* *Engliſh.*

Pig-leaves,—*carduus pratenſis* (of HUDSON), —meadow thiſtle.

Blue-caps,—*ſcabioſa ſucciſa*,—meadow ſcabious.

ſanguiſorba officinalis,—meadow burnet.

juncus articulatus,—jointed ruſh.

Clock-ſeaves, —*ſchœnus nigricans*, — black-headed bogruſh.

cardamine pratenſis, — common ladies-ſmock.

betonica officinalis *,—betony.

Henpenny,—*rhinanthus criſta-galli*,—yellow rattle.

valeriana dioica,—marſh valerian.

* BETONY. This is a common article of herbage, in the graſs lands of this Diſtrict; abounding, in almoſt every ſoil, and in every ſituation, from the marſh to the mountain. The term *Wood* Betony is ill applied to it; at leaſt in this diviſion of the Iſland.

Provincial.	*Linnean.*	*Engliſh.*
	anemone nemoroſa,	—wood anemone.
	juncus campeſtris,	—graſs ruſh.
Crakefeet,	*orches*,	—orchiſes.
Segs,	*carices*,	—ſedges.
Hay-ſeeds,	*holcus lanatus*,	— meadow ſoft-graſs.
	anthoxanthum odoratum,	—vernal.
	poa trivialis,	—common poe.
	agroſtis canina,	—brown bentgraſs.
	briza media,	—trembling graſs.
	feſtuca duriuſcula,	—hard feſcue.
	melica cærulea,	—purple melicgraſs.
	phleum nodoſum,	—bulbous catstail.
	orobus tuberoſus,	—bulbous pea.
	lotus corniculatus,	—birdsfoot trefoil.
	hypochæris radicata,	—— longrooted hawkweed.
	ſerratula tinctoria,	—dyer's ſaw-wort.
	achillea ptarmica,	—gooſetongue.
	peucedanum ſilaus,	—meadow ſaſſafras.
	vicia cracca,	—bluetufted vetch.
	polygala vulgaris,	—milkwort.
	pedicularis paluſtris,	—marſh louſewort.
	ſpiræa ulmaria,	—meadowſweet.
	lythrum ſalicaria,	—ſpiked willowherb.
	arundo phragmites,	—common reed.
	carduus paluſtris,	—marſh thiſtle.

lychnis

Provincial.	*Linnean.*	*Engliſh.*
	lychnis flos-cuculi,	—meadow campion.
Seaves,	*juncus effuſus,*	—common ruſh.
Reſhes,	*juncus inflexus,*	—wire ruſh.
	cineraria paluſtris,	—marſh fleabane.
Horſeknobs,	*centaurea nigra,*	— common knobweed.
	achillea millefolium,	—milfoil.
	Parnaſſia paluſtris,	—graſs of Parnaſſus.
	ceraſtium vulgatum,	—common mouſe-ear.
	potentilla anſerina,	—ſilverweed.
	avena flaveſcens,	—yellow oatgraſs.
	lolium perenne,	—raygraſs.
Windleſtraws,	*cynoſurus criſtatus,*	—creſted dogstail.
	feſtuca elatior,	—tall feſcue.
	agroſtis alba,	—creeping bentgraſs.
	alopecurus geniculatus,	—marſh foxtail.
	feſtuca fluitans,	—flote feſcue.
Bulls foreheads,	*aira cæſpitoſa,*	—turfy air-graſs, or haſſock graſs.
	lathyrus pratenſis,	—meadow vetchling.
	trifolium pratenſe,	—meadow trefoil.
	ranunculus acris,	—common crowfoot.
	ranunculus repens,	—creeping crowfoot.
Sourdocken,	*rumex acetoſa,*	—common ſorrel.
	angelica ſylveſtris,	—wild angelica.

comarum

Provincial. *Linnean.* *Engliſh.*

comarum paluſtre,—marſh cinquefoil.
chryſanthemum leucanth.—oxeye daiſey.
hypericum quadrangulum, — ſquare-ſtalked Saintjohnswort.
prunella vulgaris,—ſelfheal.
Woodweſh,—*geniſta tinctoria*,—dyer's broom.
ſalix,———dwarf bitter willow.
epilobium parviflorum,— ſmall-flowered willowherb.
eriophorum polyſtachion,—common cottonruſh.
ſpergula nodoſa,—marſh ſpurrey.
Bog violet,—*pinguicula vulgaris*, — common butterwort.
hydrocotele vulgaris,—pennywort.
lyſimachia nummularia,—moneywort.
menthæ,—mints.
polyganum hydropiper,—ſmartweed.
ſium latifolium,—great water parſnep.
caltha paluſtris,—marſh marigold.
iris pſeud-acorus,—yellow flag,
Threefold,—*menyanthes trifoliata*,—bogbean.
equiſetum paluſtre,—marſh horſetail.
galium paluſtre,—white bedſtraw.
veronica beccabunga,—brooklime.
ſiſymbrium naſturtium,—watercreſs.

The

The PRODUCE of this ſpecies of old graſs land is much below par. The *quality* may be judged of, by the herbage it bears; and the *quantity*, even on the incloſed parts, is not great. The parts, which yet remain as open common meadow, are ſtill leſs productive. The ſurface, in many places, is more than half of it occupied, by the ſpreading leaves of the MEADOW THISTLE; and, in others, entire patches are covered with the BOGRUSH. The medial produce about half a load of hay (if it merits the name) an acre.

The RENT, five to eight ſhillings.

GENERAL OBSERVATIONS. Nevertheleſs, it appears, demonſtrably, from the patches of corn which are intermixed with this ſpecies of graſs land, that its preſent unproductiveneſs is not ſo much owing to the nature of the SOIL, or the SITUATIONS, as to the *age* and the preſent *quality* of the HERBAGE.

A ſtronger inſtance need not be produced, of the great impropriety, *in ſome caſes*, of obſtinately withholding permiſſion to break up old graſs land.

Who, but a mere botaniſt, can ſee, without diſguſt, his eſtate occupied, by ſuch a tribe

tribe of *weeds*, as are here enumerated? eſpecially when the means of extirpation are ſo eaſy, and ſo profitable. All that is requiſite, to render the land of double its preſent value, is to annihilate the preſent ſward, and raiſe up a freſh one in its place: in doing which, if properly done, a courſe of corn crops may be profitably taken.

But neither the ſoil, nor the ſituation, of lands of this nature, fits them for a *continuance* of *arable crops*. They ought to be uſed as a *means*, only, of purging the ſoil from its impurities, and rendering it fit for the reception and nouriſhment of herbage, *whoſe every blade and leaf is nutritive*.

In the inſtance under notice, the renovation of the ſward is, now, rendered eaſily practicable. The Commiſſioners of Incloſure, for this townſhip, with a degree of judgement and ſpirit which do them the greateſt credit, and for which the townſhip will for ages be indebted to them, have ſunk a main drain, or ſhore, through the center of theſe lowlands, every acre of which is now plowable; conſequently, every owner may now chooſe, whether he will continue a ſward of paluſtrean weeds, equally unproductive and innutritious to ſtock; or whether

he

he will convert this ſward into nouriſhment for a courſe of corn crops, and then replace it with a turf of graſſes and legumes, equally productive and nutritious.

How many thouſand acres of land, in theſe kingdoms, now lie, or might eaſily be placed, in a ſimilar predicament.

II. UPPER GRASS GROUNDS. Theſe conſiſt of the prime part of the common-field lands, which have been laid down to graſs, in the *natural* way that has been mentioned.

The SITUATION is *cool*, but is, in general, *dry* enough to permit the ſoil to bear ſtock in winter.

The SOIL is a rich ſandy loam: the cooler parts, deep, and mixed with a few pebbles; the higher parts, ſhallower, with a mixture of redſtones: equally productive of graſs and corn.

The HERBAGE conſiſts of the following plants. The laſt twelve ſpecies grow, principally, near the hedges, or toward home-ſtalls; but are ſometimes found in the areas of fields.

Windle-

Provincial.	*Linnean.*	*Engliſh.*
Windleſtraws,	*cynoſurus criſtatus*,	— creſted dogstail.
	dactylis glomerata,	—orchardgraſs.
	agroſtis canina,	—brown bentgraſs.
	anthoxanthum odoratum,	—vernal.
White graſs	*holcus lanatus*,	—meadow ſoft-graſs.
	briza media,	—trembling graſs.
	avena flaveſcens,	—yellow oatgraſs.
Rye graſs	*lolium perenne*,	—raygraſs.
	poa trivialis,	—common poe.
	poa annua,	—dwarf poe.
	poa pratenſis,	—meadow poe.
	alopecurus pratenſis,	—meadow foxtail.
	feſtuca elatior,	—tall feſcue.
	feſtuca duriuſcula,	—hard feſcue.
	bromus mollis,	—ſoft bromegraſs.
	avena elatior,	—tall oatgraſs.
	avena pubeſcens	—rough oatgraſs.
	agroſtis capillaris,	—fine bentgraſs.
	hordeum murinum,	— common barley-graſs.
	juncus campeſtris,	—graſs ruſh.
Ribgraſs,	*plantago lanceolata*,	narrow plantain.
Red clover,	— *trifolium pratenſe*,	— meadow trefoil.
White clover,	*trifolium repens*,	— creeping trefoil.

Trefoil,

Provincial.	*Linnean.*	*Engliſh.*
Trefoil,	—*trifolium procumbens*,	—procumbent trefoil.
	lotus corniculatus,	—birdsfoot trefoil.
	lathyrus pratenſis,	—meadow vetchling.
Fitches,	—*vicia ſativa*,	—meadow vetch.
	ranunculus acris,	—common crowfoot.
	ranunculus repens,	—creeping crowfoot.
	ranunculus bulboſus,	—bulbous crowfoot.
	leontodon taraxacum,	—common dandelion.
	leontodon hiſpidum,	—rough dandelion.
	hypochæris radicata,	— longrooted hawkweed.
Henpenny,	—*rhinanthus criſta-galli*,	—yellow rattle.
	betonica officinalis,	—betony.
	ceraſtium vulgatum,	—common mouſe-ear.
	valentia cruciata,	—croſswort.
	prunella vulgaris,	—ſelfheal.
Birds-eye,	—*veronica chamædrys*,	—germander ſpeedwell.
	ranunculus ficaria,	—pilewort.
Cowſtriplings,	—*primula veris*,	—cowſlip.
Bairnworts,	—*bellis perennis*,	—daiſey.
Cuiſhia,	—*heracleum ſphondylium*,	— cowparſnep.

Horſe-

Provincial.	*Linnean.*	*English.*
Horſeknobs,	— *centaurea nigra*,	— meadow knobweed.
Seggrums,	—*ſenecio jacobæa*,	— common ragwort.
	achillea millefolium,	—milfoil.
Sourdocken,	—*rumex acetoſa*,	—common ſorrel.
Bluebells,	—*campanula rotundifolia*,	—common bellflower.
	plantago major,	—broad plantain.
	vicia cracca,	—bluetufted vetch.
	vicia ſepium,	—buſh vetch.
	ervum hirſutum,	—twoſeeded tare.
	tragopogon pratenſe,	— yellow goatsbeard.
	agrimonia eupatoria,	—agrimony.
	geranium pratenſe,	— crowfoot cranesbill.
Mauls,	—*malva ſylveſtris*,	—common mallow.
	malva rotundifolia,	—roundleaved mallow.
Cicely,	—*chærophyllum ſylveſtre*,	— orchardweed.
Dockens,	—*rumex criſpus*,	—curled dock.
	rumex obtuſifolius,	—broadleaved dock.
	urtica dioica,	—common nettle.

The

The PRODUCE is ſuch as may be expected, from the *herbage*, the *ſoil*, and the *ſituation*. An acre of ſome of the lands, lying immediately round the town of Pickering, will afford *paſturage* for a cow, from Mayday to Michaelmas; not by being forced with manure, but in its intrinſic nature. In general, three acres are allowed to two cows; but they are of uncommon ſize; being nearly equal to three middle-ſized cows.

The produce of *hay* is from one to two tons, an acre, in a common year. The quality of the hay, if well made, is fine; well affected by every kind of ſtock; equally fit for cows and horſes.

The RENT, thirty ſhillings to three pounds, an acre. The ſummer paſturage of a cow, forty to fifty ſhillings.

III. UPLAND GRASS. In the uninclоſed ſtate, this land was partly in arable field, partly in upland paſture, for cattle and ſheep.

The SITUATION is hilly, riſing ſomewhat abruptly, above the middle grounds. The ſubſtructure, a limeſtone rock; riſing, in ſome places, up to the ſoil, in others, a ſeam of redſtone intervenes.

The SOIL is loam, of different depths, mixed with redſtone, or with limeſtone rubble. Some parts of this land, where the ſoil is deep and the redſtone ſtratum two or three feet thick, may rank with the firſt *corn land* in theſe kingdoms.

The HERBAGE, which prevails on the old ſward of theſe uplands, may be ſeen in the following liſt:

Provincial.	*Linnean.*	*Engliſh*
	leontodon hiſpidum,	rough dandelion.
	plantago media,	middle plantain.
	hypochæris radicata,	longrooted hawkweed.
	leontodon taraxacum,	common dandelion.
Henpenny,	*rhinanthus criſta-galli*,	yellow rattle.
	chryſanthemum leucanthemum,	oxeye daiſey.
Mountain flax,	*linum catharticum*,	purging flax.
	alchemilla vulgaris,	ladies mantle.
	polygala vulgaris,	milkwort.
	feſtuca duriuſcula,	hard feſcue.
	anthoxanthum odoratum,	vernal.
White graſs,	*holcus lanatus*,	meadow ſoft-graſs.

avena

Provincial.	*Linnean.*	*Engliſh.*
	avena pubeſcens,	—rough oatgraſs.
	avena flaveſcens,	—yellow oatgraſs.
	briza media,	—trembling graſs.
	agroſtis canina,	—brown bentgraſs.
	dactylis glomerata,	—orchardgraſs.
	poa trivialis,	—common poe.
Rye-graſs,	*lolium perenne*,	—raygraſs.
Windleſtraws,	*cynoſurus criſtatus*,	— creſted dogstail.
	poa pratenſis,	—meadow poe.
	phleum nodoſum,	—bulbous catstail.
	avena elatior,	—tall oatgraſs.
	feſtuca ovina,	—ſheep's feſcue.
	juncus campeſtris,	—graſs ruſh.
	carex ——, ——	ſedge.
	plantago lanceolatus,	—narrow plantain.
Red clover,	*trifolium pratenſe*,	— meadow trefoil.
	trifolium alpeſtre,	—alpine trefoil.
White clover,	*trifolium repens*,	— creeping trefoil.
Trefoil,	*trifolium agrarium*,	—hop trefoil.
	lotus corniculatus,	—birdsfoot trefoil.
	lathyrus pratenſis,	—meadow vetchling.
	orobus tuberoſus,	—bulbous pea.
	anthyllis vulneraria,	—ladiesfinger.
	galium verum,	—yellow bedſtraw.

Provincial.	*Linnæan.*	*English.*
	campanula rotundifolia,	—common bell-flower.
	veronica chamædrys,	—germander ſpeed-well.
	euphraſia odontites,	—red eyebright.
	euphraſia officinalis,	— common eye-bright.
	valantia cruciata,	—croſſwort.
	ceraſtium vulgatum,	—common mouſe-ear.
	betonica officinalis,	—betony.
	prunella vulgaris,	—ſelfheal.
Cowſtriplings,	*primula veris*,	—cowſlip.
	ranunculus ficaria,	—pilewort.
Dog-daiſies,	*bellis perennis*,	—daiſey.
	draba verna,	—whitlowwort.
	thymus ſerpyllum,	—wild thyme.
	potentilla reptans,	—creeping cinquefoil.
Horſeknobs,	*centaurea nigra*,	— common knobweed.
	ranunculus acris,	—common crowfoot.
	ranunculus repens,	—creeping crowfoot.
	ſcabioſa arvenſis,	—corn ſcabious.
	ſcabioſa columbaria,	— mountain ſcabious.
Bluecaps,	*ſcabioſa ſucciſa*,	— meadow ſcabious.

Yernuts,

Provincial.	*Linnean.*	*Engliſh.*
Yernuts,	—*bunium bulbocaſtanum*,	—earthnut.
	achillea millefolium,	—milfoil.
Seggrums,	—*ſenecio jacobæa*,	—common ragwort.
	heracleum ſphondylium,	—cowparſnep.
	orchis maſcula,	—male orchis.
	orchis morio,	—fool's orchis.
	orchis uſtulata,	—upland orchis.
	poterium ſanguiſorba,	—upland burnet.
	origanum vulgare,	—wild marjoram.
	ſpiræa filipendula,	—dropwort.
	agrimonia eupatoria,	—agrimony.
	valeriana officinalis,	—medical valerian.
	marrubrium vulgare,	—horehound.
	ſanicula europæa,	—ſanicle.
	gentiana centaurium,	—centaury gentian.
	reſeda luteola,	—weld.
	crepis tectorum,	—ſmooth crepis.
	ſtellaria graminea,	—meadow ſtarflower.
	vicia cracca,	—bluetufted vetch.
	ervum hirſutum,	—twoſeeded tare.
	geranium robertianum,	—ſtinking cranesbill.
	geranium diſſectum,	—jagged cranesbill.
	geranium cicutarium,	—hemlockleaved cranesbill.
	ſherardia arvenſis,	—field ſherard.

Provincial.	*Linnean.*	*English.*
	hieraceum pilocella,	— mouſeear hawkweed.
	aphanes arvenſis,	—parſleypert.
Breckens,	*—pteris aquilina,*	—brakes; fern.
Bur thiſtle,	— *carduus lanceolatus,*	— ſpear thiſtle.
	carduus nutans,	—nodding thiſtle.
	carduus eriophorus,	— woollyheaded thiſtle.
	ſerratula arvenſis,	—common thiſtle.
Red thiſtle,	*—carduus paluſtris,*	—marſh thiſtle.
	carlina vulgaris,	—carline thiſtle.
Ruſtburn,	*—ononis arvenſis,*	—reſtharrow.
Cat-whin,	*—roſa ſpinoſiſſima,*	—burnet roſe.

The PRODUCE, in a dry year, little or nothing. On a par of years, half a ton of *hay* an acre. The ordinary allowance for a ſummer *paſturage* of a cow, two or three acres.

The RENT ten to thirty ſhillings.

Land bearing this deſcription is entirely unfit for *perennial ley.* Arable crops, intermixed with TEMPORARY LEY, are much more ſuitable to its nature.

II. The GENERAL MANAGEMENT OF GRASS LAND, in this country, now requires to be regiſtered.

The

The OBJECTS are *hay* and *paſturage*; each of which will require to be ſeparately conſidered. But there are certain OPERATIONS, which are common to them both, and which demand a previous conſideration. Theſe are,

1. Draining,
2. Clearing,
3. Dreſſing.
4. Weeding,
5. Manuring.

1, 2. DRAINING, CLEARING. Theſe two operations have been already ſpoken of, ſufficiently, under the general management of ARABLE LAND; excepting ſo far as relates to *clearing away anthills*.

Here, as in moſt places, this operation is too much neglected. When practiſed, the hills are either taken off with a paring ſpade, or perhaps a plow, level with the ſurrounding ſward, and carted into hollows &c, ſowing the hillſteads with hayſeeds; or, in one inſtance, I ſaw the cap of the hill firſt taken off thin, and, when the body of the hill was removed, the cap was laid upon the hillſtead. But this is ineligible. No implement can come upon the ſurface to dreſs it; and the caps are liable to be miſplaced, by cattle and other ſtock.

The practice of GELDING * has *lately* been introduced. The greateſt nicety of the art, I find, lies in clearing away the *ſkirts* of the core effectually; ſo that when the flaps are returned, a rim, riſing above the ſurrounding ſurface, be not left, for the molding ſledge, or other implement, to lay hold of.

If this operation be performed in *autumn*, the froſts and rains of winter will temper the cores, and, in the firſt dry weather of ſpring, the molding ſledge will readily reduce them, and lodge them at the roots of the graſs.

If the operation be imperfectly done, or the lumps of core remain ſtubborn, a heavy roller ſhould be run over the ſurface, before the molding ſledge be uſed.

No man, who has attended to the quality of the *herbage of anthills*, needs any argument to convince him of the propriety of beſtowing a little attention, on the moſt eligible means of extirpation.

3. DRESSING MEADOWS. The Vale huſbandmen are peculiarly aſſiduous, in this department of the management of graſs lands, which, in the ſpring of the year, engages much of their attention. The dung and molehills

* See NORFOLK—MIN. 50.

molehills are generally ſpread, repeatedly, and the ſtones and wood aſſiduouſly gathered off. The ground, intended for hay, is more particularly attended to; but paſture grounds are paid their ſhare of attention.

"Molding," that is ſpreading dung and molehills, is either done wholly by hand, with a "molding rake;" namely, a ſhort flat-headed rake, with four flat teeth (a tool not uncommon in other Diſtricts); or by the means of a "molding ſledge" (ſee IMPLEMENTS), an implement introduced into this country, ſome twenty or thirty years ago.

The firſt molding is given, the firſt dry days of ſpring; generally about Candlemas. Old molehills are found to get heavy, and firm, by lying; and if horſe dung be not broken while moiſt, it is difficult to be reduced *.

The

* I have met with one inſtance of molding *paſture grounds*, at *Michaelmas*, (when ſtock is here uſually tranſferred from paſture grounds to aftergraſs) a practice which ought to be univerſally adopted. The ſurface is, then, generally open enough to admit the dung which is ſpread upon it; whereas, in ſpring, being ſpread over a ſurface, ſaturated with water, it is probable that much of it is waſhed away, with heavy rains, or diſſipated by froſts. Molding, in early autumn, is ſimilar, in its effects, to the practice of manuring graſs land, at that ſeaſon.

The ſoil muſt become firm, before the ſledge can be uſed with propriety. After the ſurface has been poliſhed by this, it is finally looked over, with the rake; eſpecially round the borders, where the ſledge may have left it unfiniſhed.

Hand molding is done, entirely, by women. Their wages 6d. a day.

This may be a proper place to mention an opinion, which I have met with in this Diſtrict, reſpecting MOLES.

A man, whoſe examinations are ſeldom ſuperficial, is clearly of opinion, that moles are uſeful to the farmer. And, under this idea, he has not had a mole killed, upon his farm, during the laſt twenty years! He believes them to be uſeful, in draining the ſoil, in communicating air to the roots of plants, in raiſing freſh mold upon graſs land, and in *killing worms*; which, he conceives, feed upon the roots of graſs and corn.

That moles are uſeful to *cold ſtrong-textured* land, and to *graſs land* in general, is probably a fact; and this may account for the opinion under notice; which was formed on ſoil of that deſcription; or on graſs land of a more loamy nature.

But

But admitting that moles are uſeful upon cold ſtrong graſs land, it does not follow that they likewiſe are uſeful, on *light, thin-ſoiled, arable land.* Their miſchiefs, here, are too obvious to be overlooked

With reſpect to WORMS, too, moles are probably miſchievous. No evidence, I apprehend, has ever been produced of their feeding on the roots of vegetables. I ſpeak of the common EARTHWORM; not of the grubs of beetles, &c. They are ſaid to draw leaves and other vegetable ſubſtances into the ground; but to what end is only conjectured. It may be in purſuance of the wiſeſt dictates, and for the beſt of purpoſes.

I mention this ſubject, becauſe I believe it is *new* to the public; and I mention it in this curſory way, becauſe I have not *yet* had opportunity of ſtudying it maturely. It appears to me, however, a ſubject of the firſt importance in Rural Economy: for meanly as we are habituated to think of this lowly drudge, the proſperity of the vegetable and animal creation may hinge upon it. Its natural hiſtory appears, to me, a ſubject of ſufficient importance, to engage the attention of any man, let his abilities and pretenſions be what they may: and it is a ſubject which

any

any man of leiſure may apply himſelf to, without difficulty.

4. WEEDING GRASS LAND. This department of the graſs land management is too little attended to. Beds of the *common thiſtle* are too frequently ſuffered to ſeed in paſtures, to the great nuiſance of the neighbourhood; while both meadows and paſtures are, not unfrequently, diſgraced with the *dock*; a weed which requires much leſs induſtry to extirpate it.

I met with an inſtance of a meadow, foul in the extreme with *knobweed*, cured by paſturing it repeatedly with *ſheep*, in the ſpring. *Ragwort* I have known killed in the ſame manner.

I likewiſe met with an inſtance, here, of a bed of *docks* being deſtroyed by *ſwine*; or by *mowing*. The fact was, a large patch of docks, as thick as they could grow upon the ground, were liable to the bite of ſwine (ſome ſpecies of which will feed on them with avidity); and what they left was repeatedly mown off, perhaps twice or thrice in a ſummer, for a ſucceſſion of years. At length, they vaniſhed as by a charm; and were ſucceeded by a thick ſward of the finer graſſes.

Perhaps,

Perhaps, neither the ſwine nor the ſithe could be ſaid, with ſtrictneſs, to have killed theſe docks; which, it appears to me evidently, *died of age*. No vegetable is everlaſting. Some are annual, ſome are biennial, others perennial. But the age, or natural life of perennial *herbs*, has not perhaps been attended to. We may, however, take it for granted, without experience, that all plants, which propagate their ſpecies by ſeed alone, may be ſubdued by perſevering to prevent their ſeeding. All that we want to know, from experience, is their ſeveral degrees of *longevity*; in order that we may calculate the difference, between the expence of heading them, from time to time, and that of deſtroying them, at once, by the more expenſive proceſs of eradication.

5. MANURING GRASS LANDS. The dung cart is ſeldom drawn upon graſs land. The quantity of *dung* which is made in the Diſtrict (ſee FARMYARD MAN.) is ſmall; and is chiefly applied to arable lands; while the collecting of *mud*, *roadſtuff*, and other materials, meliorating to graſs land, is ſhamefully neglected.

Fodderings on graſs, in winter, is chiefly depended upon, as an equivalent for its exhauſtion

hauſtion by *hay*; and *paſtured* ground is conſidered as ſtanding in no need of extraneous aſſiſtance.

If a piece of mown ground were to have the *whole* of the crop returned to it, in fodder, and in a proper manner, it is probable, that ſuch ground might be repeatedly mown, without being materially exhauſted. But the foddering ſhould certainly be *general* to the whole piece; beginning on one ſide, and *teathing* it regularly, in the Norfolk manner, (ſee NORFOLK, Article TURNEPS), until the oppoſite ſide be reached: not, partially, under the hedge, as is moſtly the caſe, here. The hedges are, no doubt, crept to for ſhelter: in windy weather, eſpecially, hay will not lie in an expoſed place: but, certainly, the hedge ought to be conſidered, as a reſource to fly to, in ſtormy weather; returning to the area of the field, whenever the ſtorm may abate.

The GOOD EFFECT of foddering, on any graſs land *which will bear the treading of ſtock in winter*, is evident to common obſervation.

The great danger to land, which is inclined to *tenacity*, is that of its being *caught in the drought of ſpring*; before the ſward be relieved by rains or by froſts; which, by tempering

pering the ſurface, is obſerved to releaſe the graſſes from their confinement, in the foot-ſteps of ſtock. On ſuch land, the foddering ſhould not be continued too late in the ſpring.

On *light-land* graſs, many advantages ariſe from this practice. The fodder is laid up, and the manure carried on, at a ſmall expence. The contexture of the ſoil is improved, and moſs (the greateſt enemy of land of this deſcription) checked or deſtroyed, by the treading of ſtock. There can be no doubt that, in ſome caſes, and under proper management, ſtacking hay in the field, and foddering with it on the land it grew on, may be perfectly eligible. Much depends upon the nature of the land, and much upon whether the given piece of graſs, or the arable land in the ſame occupation, is moſt in want of melioration.

But advantageous as this management may be, in ſome caſes, to *light-land* graſs, a ſtriking inſtance of the inutility of teathing *ſtiff land, in winter*, with ſheep, occurred in this neighbourhood. A piece of low cold retentive (but well ſheltered) Ingland was foddered upon, during a ſucceſſion of ſevere weather, until its ſurface was black with dung. Great

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expectations of improvement were formed; but no ſenſible benefit whatever followed.

From this and other inſtances of a ſimilar nature, it is more than probable, that *teathing* cloſely textured land, in winter, is equally ineligible as *manuring* it, in winter; an impropriety which I am fully convinced of, from my own practice; and which all countries are *beginning* to be aware of. I am afraid, however, that the principal part of the little manure which is ſet upon graſs lands, in this Diſtrict, is carried on during the froſts of winter; the worſt time invention can deviſe.

Lime is, in the general idea of the country, rather injurious, than beneficial, to graſs land. Evidences are produced againſt it; but they are not concluſive: the trials, which are ſaid to have been made, were on cold retentive ſoils; the leaſt likely, perhaps, to be improved by lime. To corn crops, lime is moſt beneficial, on dry warm ſoils; and ſome recent experience here ſhews, that on ſuch ſoils lime is beneficial to graſs.

A quantity of lime having been ſcattered accidentally on ſward, it was obſerved to injure the herbage, conſiderably, for the firſt three or four years. This of courſe corroborated

borated the opinion of its being injurious to graſs. But, in a few years more, this incidental patch became much ſuperior to the reſt of the piece, it lies in; and has, now, continued to be ſo, for ſome years. The ſoil, a middle loam, on a rocky ſubſtratum.

This led to an experiment with a ſmaller quantity; namely, four chaldron, an acre, on a piece of declining moſſy ſward, on a burning ſand, in an upland ſituation.

This experiment was made, laſt autumn. The preſent ſtate of it is ſtriking (Sept. 1787). The entire countenance of the land is changed: the ſward has acquired a dark-green healthy color; and, already, the moſs has moſtly diſappeared: while the remainder of the piece (the whole eaten with ſheep) is covered with a fleece of moſs, intermixed with parched, ſtraw-colored herbage

Thus far, and as far as one experiment reaches, this under notice is, deciſively, in favor of lime being beneficial to a ſcorching upland ſoil. For reviving the productiveneſs of old ſheep walks and rabbit warrens, lime may, perhaps, be found a moſt profitable manure.

A remarkable incident occurs, this year, (1787) near Pickering. Part of the com-

mon has been, I believe, time immemorial, in uſe as a whitening ground — provincially, "bleaching greens."—The ſoil, drift ſand left by a brook which frequently overflows thoſe greens; the ſubſoil gravel; left, in all probability, by the brook, in ſhifting its channel, from time to time. Nevertheleſs, ſuch was the *ſuperficial appearance* of this valley, while it was uſed as a whitening ground, that the Commiſſioners under the Incloſure valued the land (laſt ſummer a dry ſeaſon) at forty to fifty ſhillings rent, an acre. But, this year, the bleaching being diſcontinued, it has turned out not worth fifty pence, an acre; notwithſtanding the uncommon power which vegetation has this year, every where elſe, manifeſted.

The parts where the webbs have uſually lain, are evident to common obſervation: ſcarcely a blade of graſs has, this year, ſhewn itſelf upon them. Even the ſedges and other paluſtrean weeds, which attempt to grow, are not able to hide the dead-looking ſand, among which they are rooted. The ſoil, naturally weak, is at preſent evidently exhauſted. But query, how has this exhauſtion been effected? By the *lime*, which has been uſed in bleaching? Or by the *watering*,

watering, which it has heretofore conſtantly had, through the ſummer? Or by the *warmth of the webbs*; which, acting as a gardener's frame, has induced the ſoil to exert itſelf beyond its natural ſtrength? The effect is well aſcertained; but, evident and intereſting as it is, it appears to me difficult to be accounted for, ſatisfactorily.

III. MANAGEMENT OF MOWING GROUNDS. All old graſs land, which is *mown*, is here called "MEADOW;" whether its ſituation be low or high, dry or moiſt. It is merely a term in contradiſtinction to PASTURE, or "ſummer-eaten" ground; which name it may take the enſuing year; it being a pretty common practice to mow and ſummer-eat, alternately.

This, however, is far from being a general practice; the ſame lands will be mown, and others will be uſed as cow paſture, for ſeveral years ſucceſſively. But on the lands which are deſcribed above, as upper graſs grounds, an alternacy, though not perhaps annual and regular, generally takes place.

In deſcribing this department of Management, a fourfold diviſion of the ſubject will be requiſite.

1. Spring Management;
2. Haying;
3. Aftergrass;
4. Winter Management.

1. SPRING MANAGEMENT OF MEADOWS. The general practice is to "eat" them, until *Old Mayday*; when the stock is transferred to the pasture grounds, and the meadows finally shut up, for hay.

In this climature, the practice is injudicious. It throws haytime too backward, in a common year. And, if dry weather set in early, the ground, having no covering, is parched with drought, and the crop of *hay, perhaps*, thereby lessened.

In Surrey, and round the metropolis, grounds intended to be mown are scrupulously freed from stock, early in the spring; not a spring shoot is cropped. This is the opposite extreme: and, if the land will bear stock, is also improper. Some valuable spring feed is lost; the frosts destroying that which would be of service to stock.

Land may, in general, be eaten, until OLD LADYDAY, or the MIDDLE OF APRIL, without injuring the crop of hay. Early weeds, and the ranker grasses, are checked; by which

which means the better bottom graſſes are ſuffered to riſe and ripen with them.

2. HAY HARVEST. To give a minutial account of this department of the graſsland management, it will be requiſite to conſider, ſeparately, the following ſubdiviſions:

1. Mowing;
2. Making;
3. Preſerving.
4. Expenditure.

1. *Mowing.* This is done chiefly by the "day mowing," which is an inaccurate acre; ſometimes more, but generally leſs than a ſtatute acre; old incloſed meadows having been reckoned, from time immemorial, ſo many "day mowings;" and whether they are, in reality, a greater or leſs number of acres, they are conſidered as ſo many days' works.

The wages for mowing, one ſhilling to eighteen pence, a day, and board. Little or no mowing is done by the acre. A man ſeldom mows more than his day's mowing; which, if he be a good hand, he performs in a few hours, in the morning and evening; generally lying by, in the middle of the day.

The Yorkſhire mowers labor hard, during the ſhort hours they work: their ſithes are of uncommon length, and they take their ſwath of unuſual width; ſeldom leſs than three yards; ſome of them ten or eleven feet wide. They invariably "keep ſtroke;" that is, all ſtrike together as one man; a practice which is at leaſt pleaſing to the looker-on.

2. *Making.* All countries, I find, abound in bad haymakers; and ſome are deſtitute of good ones. The country under ſurvey may be ſaid to be above mediocrity; and that is as much as can be ſaid of it. Quantities of hay are annually waſted, and ſtill greater quantities unneceſſarily injured, through bad management. It is ſeldom tedded ſufficiently; is frequently expoſed, all night, abroad, in catching weather; and, in ſuch weather, is too often carried before it be dry.

A ſingular expedient is here practiſed to get it (as it is intended) out of harm's way. This is to put it into "pikes," or ſtacklets, of about a load each, before it be fit to be put into ſtack; and, too frequently, before it be fit to be put into large cocks. This is conſidered as a middle ſtage; in which it is

to

to take a partial heat, and becomeprepared for the ſtack.

If hay be free from external moiſture, yet too full of ſap to be truſted in ſtack, "piking" it may be of great uſe. But it is more generally made uſe of, as a ſlovenly expedient, for getting hay out of hand, in a tedious ſeaſon. In this caſe, however, it is moſtly miſchievous. I have ſeen theſe pikes, when opened out to be carried to the ſtack, white with mould, black with rottenneſs, and of every intermediate color, excepting that which alone is deſirable.

In the beſt practice of the Diſtrict, the graſs, in fine weather, is tedded after the mowers; or, in ſhowery weather, as ſoon as a fair opportunity offers. In the evening, unleſs due confidence can be placed in the weather, it is put into cocklets—provincially, "hipples;" made in different ways; ſome being ſet up hollow, with the foot and the head of the rake; others, in the common way, with forks. As the hay has advanced in dryneſs, the hipples are increaſed in ſize.

When a fair opportunity offers, and the graſs is perfectly dry, the hipples are "ſundered;" that is, broken out into beds, in the uſual manner; turned; and again got up into

cocklets, of ſuch ſize as the ſtate of dryneſs requires. When ſufficiently dry, the hay is made into well ſized cocks; namely, about eight or ten to the load; horſes being ſometimes uſed in this operation. See the next Article.

When the crop is intended to be ſtacked on the piece it grew on, the firſt-made part generally ſtands in theſe cocks, until the whole, or the principal part of the remainder, be ready for the ſtack; which, by this means, is never expoſed abroad in its firſt ſtages: a circumſtance, however, which is too commonly ſuffered, by leſs judicious hay-farmers.

3. *Preſerving Hay.* The moſt prevalent practice is to ſtack it in the field; either for the purpoſe of foddering with it on the ground, or to be fetched home, in froſty weather, or when wanted. Much, however, is carried to the homeſtall, at hay time; ſome to be ſtacked; others to be houſed; the latter a practice which, when room can conveniently be had, ſeems to be in good eſtimation. It is at once got out of the way of the weather, and probably into the place, in which it will be wanted: the muſtineſs of houſed hay, which

which is talked of in ſome places, is not perceived in this.

The practice of STACKING HAY IN THE FIELD adds much to the eaſe and diſpatch of hay time. If the ſtack be placed in the center of the ground, a conſiderable part of the hay may be collected, without the trouble of loading it on a carriage.

If it be in large cocks, it is ſometimes drawn to the ſtack, with one horſe; by means of a cart rope, put underneath the ſkirts of the cock on the ſides, and above the ſkirts on the back part; giving the bend of the rope ſufficient hold of the hay, to prevent its being drawn from under the cock. The two ends of the rope-paſs to a pair of hames; to which one end is fixed, the other being kept in its place by a wooden pin. When the cock arrives at the rick, the peg is drawn, and the rope is diſengaged.

If the hay be abroad, it is rowed in the uſual way, and is ſometimes drawn together with a long pole (ſix or eight feet long), with a rope paſſing, from each end of it, to the hames; a man ſtanding or preſſing upon the pole, to keep it down to its work, and make it clear the ground as it goes. This however, though ſimple, is a difficult buſineſs. More complex

complex implements, of various conſtructions, have therefore been contrived, for this purpoſe.

Theſe implements are alſo uſed in *cocking*; and, when the quantity of dry hay is great, and hands ſcarce, it eaſes and expedites the buſineſs very conſiderably. For, in this caſe, the main burden of the hay is drawn together by the team, the rakers having only the bared ground to rake over; following the implement, and drawing the rakings to the part to be cleared, by the next ſweep of the implement; beginning on one ſide of the piece, and proceeding, in this regular and expeditious manner, to the other; leaving the hay in large rows, eaſily to be cocked; or to be dragged to the ſtack; or loaded; as occaſion may require. This expedient, however, is far from being in general practice.

When the ground near the ſtack is cleared, and the ſtack has riſen too high to be conveniently forked upon, from the ground, the outſkirts of the field are drawn together in carriages.

In the beſt practice of the Diſtrict, the ſtack, if not very large (which field ſtacks ſeldom are), is never begun upon, until a ſufficiency of hay be dry, to get it above the eaves,

eaves, the firſt day. If the whole be ready, the middle of the ſtack is rounded up, and the remainder ſet in tall "pikes," by the ſide of it, ready to be laid on, the firſt fine day after the ſtem be ſufficiently ſettled. This appears, to me, to be bringing the buſineſs of laying up hay, in the field, as near perfection as the nature of it will admit.

Field ſtacks are, I believe invariably, made round. The favorite *form*, at preſent, ſeems to be that of an *egg*; a form, perhaps, of all others the moſt beautiful, but by no means the moſt convenient *.

When the hay has done heating, the ſtack is finally topt up, its roof adjuſted and raked, and its top *capt with thatch*; the principal part of the roof being left naked.

In a country where thatching the entire roof is the eſtabliſhed cuſtom, this would appear negligent management. In this country, to beſtow thatch and thatching, upon the whole, would be deemed a waſteful extravagant practice. It would be difficult to ſay, with

* In CLEVELAND the oppoſite extreme prevails. The *turnep* is there the archetype. If hay ſtacks be made *round*, a form between the egg and the turnep is preferable to either extreme; but, in my opinion, a *barn* is the beſt model for a hay ſtack.

with certainty, which is the better practice; much depends on a plenty or ſcarcity of ſtraw. Either of them is good, if properly executed.

Field ſtacks are *fenced* with large hurdles, provincially "ſtack-bars;" reſembling the gate hurdles of ſome Diſtricts, and the cattle hurdles of others. Being placed in a ring, and united together with pins paſſing through the heads, they form an arch, and become a ſimple and ſufficient fence againſt every kind of ſtock.

4. *Expenditure of Hay.* There is no regular *market* for hay, in the Diſtrict. It is ſeldom *ſold*, but in times of ſcarcity. It is moſtly *conſumed*, on the premiſes: chiefly in the houſe, but partly in the field; a practice which has already been ſpoken of.

3. AFTERGRASS. The *expenditure* of aftergraſs, in this country, is principally on milked cows; ſome on dry fatting cows, and ſome on oxen, thrown up from work, in the ſpring, and finiſhed with aftergraſs.

Time of Breaking. In ſome places, cattle are turned into meadows, as ſoon as the crop is out of them. This is fouling the ground without any advantage to the cattle, which will

will not, cannot, eat the *ſtubble* of mown ground *.

In this country, the oppoſite extreme of management is too prevalent. AFTERGRASS, provincially, "fog," is ſcarcely ever broken, till *after Michaelmas*; is ſometimes hoarded up, till near *Martinmas*, before it be turned into. In the latter caſe, half of it, perhaps, is waſted. Whether the weather prove wet or froſty, one of which may reaſonably be expected, at that time of the year, cattle deſtroy as much long overgrown aftergraſs, with their feet, as with their mouths. Wherever they tread, in wet weather, the graſs is fouled; wherever they ſtep, when froſt is on the ground, the graſs they tread on is deſtroyed.

GENERAL REMARKS ON THE MANAGEMENT OF AFTERGRASS.

It is a matter of ſurprize that no country has yet adopted AN ECONOMICAL EXPENDITURE OF AFTERGRASS. I have met with ſome faint attempts, in the practice of individuals, in different places; but nothing of a regular confirmed eſtabliſhed practice.

There

* But ſee WEST OF ENGLAND, Art. AFTERGRASS.

There is one leading principle of management, which is eaſy to be obſerved, and by which alone, perhaps, half the preſent waſte might be avoided. This is the ſelf-evident and ſimple one of not ſuffering cattle to remain *at nights*, on aftergraſs, nor of permitting them to return to it, in the morning, *while froſt remains on the ground.*

In ſtrictneſs, they ought never to be ſuffered *to lie down among it*, but ſhould be removed, as ſoon as their appetites are palled. Even this, when the expenditure is on cows, is not difficult. But fatting cattle may, perhaps, require more indulgence. Theſe, however, might, without injury, be let out, in the evening, into an adjoining ſtubble or paſture ground, and be ſuffered to return in the morning, with very little extraordinary attention or trouble. Cows might be folded in a yard, or kept in the houſe, or in the field, as circumſtances might require.

Graſs which has been trampled under foot, in the manner deſcribed above, neceſſarily remains, in winter, an encumbrance to the ſurface. If the ground be foddered upon, ſome of it will of courſe be worked off by cattle; and horſes will eat a ſtill greater ſhare of it. Still, however, the ſward will be ragged

ragged in the ſpring; a circumſtance that ought to be avoided. In the early part of ſpring, aftergraſs ought to be level; that is, either *entirely bare*, or covered with a *ſufficient even bite* of unſoiled aftergraſs, or winter-freed paſturage.

Two of the moſt intelligent rural economiſts of theſe kingdoms make a point of ſaving autumnal graſs, for ſpring feed; and they are probably right when they aſſert, that it is the moſt certain, and, on the whole, the beſt ſpring feed, which is, at preſent, known.

On theſe principles, the right management of aftergraſs is evident. The forwardeſt ought to be broken, ſufficiently early, to be eaten, without waſte, before winter ſet in; and the lateſt, that is to ſay, the ſhorteſt, ſhould be ſhut up for ſpring feed. If aftergraſs be too long and groſſy, it is apt to lodge, and rot upon the ground in winter. Therefore, on rich land, it ought to be more or leſs fed, before Michaelmas; and then, while of a due length, to be ſhut up during winter.

IV. PASTURE GROUNDS. The management of paſture grounds requires to be ſubdivided into

1. Spring Management.
2. Stocking.
3. Summer Management.

1. SPRING

1. SPRING MANAGEMENT. In the ordinary practice of the Diſtrict, paſtures are ſhut up, in winter, or early in the ſpring, and kept free from ſtock, until *Old Mayday*.

GENERAL REMARKS ON THE SPRING MANAGEMENT OF GRASS LANDS.

This appears to me to be bad management. At Old Mayday, in a common year, and on an ordinary ſoil, there is a ſufficient bite, over *every part of the ſurface*. Cattle of courſe *chooſe the better herbage*. They have no inducement to crop the *weeds* and *coarſer graſſes*, which they ſuffer to run up to *ſeed*, thereby, in the inſtant, encumbering the ſurface, and, in the conſequence, increaſing their quantity; thus tending to leſſen, in a twofold way, the proportion of NUTRITIOUS HERBAGE.

Even ſuppoſing the ſward to be perfectly free from weeds and coarſe graſſes, it is bad management to ſuffer ſtock (STORE STOCK) to be turned upon a full bite. They cannot, if duly ſtocked, keep the whole of it under. Much of it will inevitably run up to ſeed, forming tufts and uneaten patches, which (if not removed with the ſithe) remain, during the

the ſummer, as uſeleſs to the grazier, as if they were not included within the limits of his paſtures. They are ſo much *waſte ground.* The quantity of grazing ſurface, or, in other words, the *ſize of the paſture,* is leſſened, *in proportion to the quantity of ſtale herbage.*

On the contrary, if ſtock be admitted into paſtures, while the *early weeds* are yet in a *tender ſtate,* and before the ſurface be covered with *better herbage,* every weed will be cropped, and every part be *equally eaten.* Even *ruſhes,* when they firſt ſhoot, are eaten freely by cattle and horſes; eſpecially the latter. The *cowparſnep, ragwort, knobweed,* and other groſs early plants are, on their firſt emerſion, devoured greedily by cattle and ſheep.

But changing *weeds into nutriment,* and increaſing the *quantity of paſturing ſurface,* are not the only advantages ariſing from breaking paſtures, early, with ſtore cattle. The cattle themſelves are benefited by being removed, by degrees, from dry meat to ſucculent herbage; and thereby, in all human probability, preſerved from many diſorders, which cattle are liable to, on their being firſt turned out to graſs in the ſpring.

It will be ſaid, that, under this management, paſture grounds require to be ſtocked *thinner*, than in the uſual practice. For a few days, immediately after Mayday, the paſture will be comparatively *ſhort* (a circumſtance, perhaps, favorable to cattle when firſt turned out wholly to graſs), but, afterwards, the advantage will be evidently in favor of early breaking; inaſmuch as the quantity of ſurface is thereby encreaſed. It is therefore demonſtrable, that, under this management, paſtures may be ſtocked *thicker*, than in the common practice.

FATTING CATTLE, which are forward in fleſh, and are intended to be *finiſhed* with graſs, may require a full bite at the firſt turning out. But for COWS, WORKING OXEN, REARING CATTLE, and lean cattle, intended to be *fatted* on graſs, a full bite, at the firſt turning out, is not requiſite.

Another objection, which may be made to early grazing, is that of laying the land open to the drought of ſpring. This, too, is in great meaſure, when applied to *paſturage*, an ill grounded apprehenſion. It is notorious to common obſervation, that cows milk, and cattle in general thrive, beyond expectation, in *droughty weather*. It is not the *length of graſs*,

graſs, but the *quantity of nouriſhment* it contains, which makes cattle pay for their paſturage. In dry ſeaſons, medicinal waters are ſtrongly impregnated, and fruit expoſed to the ſun in ſuch ſeaſons, is ſweeter and more highly flavored, than it is in a moiſt ſeaſon, or a ſhady ſituation; but the diſtillers of eſſential oils are the beſt judges of the effects of ſeaſons on herbage.

The richneſs of vegetable productions appears to be in proportion to the quantity of heat, in the immediate ſphere of their vegetation. Thus the richneſs of fruit is increaſed, by the reflection of the wall; and it ſtrikes me that the richneſs of graſs is increaſed, by the reflection of the ſoil. Long graſs ſhades the ſoil and deſtroys the reflection. The ſhorter the graſs the ſtronger the reflection, and, conſequently, the richer the herbage.

But the longer the graſs, the ſooner the cattle ſatisfy their hunger, and lie down to reſt. A MEDIUM, therefore, is obſervable. The due length depends upon the nature of the ſtock, the nature of the ſoil, and the nature of the ſeaſon. Rich graſs goes farther than that which is watery and weak. A good grazier looks to the condition of his

cattle, rather than to the length of their paſture.

Theſe obſervations are drawn from my own experience, as well as from the practice of one man in this Diſtrict, who, by early ſtocking, keeps not only his rough paſtures, but even his yards, in a great meaſure level, and free from encumbrance.

OLD LADYDAY to the MIDDLE OF APRIL, according to the progreſs of ſpring, appears to me, at preſent, as the beſt time for *ſhutting up mowing grounds* and *opening paſtures*.

2. STOCKING PASTURES. The *ſpecies* and the *quantity* require to be ſeparately conſidered.

No ſettled rules, with reſpect to the *mixture of ſpecies*, are here obſerved. It is generally underſtood, that *horſes* and *cattle*, intermixed, will eat graſs, cleaner, than either ſpecies will, alone; not ſo much from their ſeparately affecting different graſſes, as from the circumſtance of both ſpecies diſliking to feed near their own dung.

Horſes, it is true, appear partial to particular patches of ſward; but, on cloſe examination, I have never been able to diſcover any peculiarity, in the *ſoil*, or the *herbage*, of theſe barely eaten ſpots; which are, I apprehend,

prehend, firſt eaten to the quick, fortuitouſly, and are afterwards kept down, through their *peculiar ſweetneſs*, owing to the *peculiar ſhortneſs of the herbage*. Hares and rabbits, in the neighbourhood of kept covers, keep down patches of barley or other corn, in a ſimilar manner, and through ſimilar motives.

Beſides this unfair manner of feeding, the HORSE is diſliked in paſtures, on account of the worthleſſneſs of the DUNG OF HORSES, at graſs.

This, when the ſuperior value of their dung, in the ſtable, is conſidered, appears ſomewhat paradoxical. The idea, however, is not confined to this Diſtrict, nor to this Iſland; it prevails, I am well informed, in America, and more or leſs, perhaps, in every place, where huſbandmen obſerve, inattentively.

The idea has, no doubt, ſome foundation. The dung of horſes, dropped on graſs in ſummer, ſoon undergoes a change. Its ſubſtance is preſently ſcooped out by inſects; nothing but a porous bundle of undigeſted vegetable matter being left. If inſects not only eat horſe dung, but fly away with it out of the field, it is in reality loſt, to that particular field; but if, what is moſt likely, they

drop it again, near the place where it was taken up, and, at length, find a grave, for their own bodies, among the graſs, the occupier of the land ſuſtains no loſs.

SHEEP, I believe, are ſeldom mixed, here, either with cows or fatting cattle. They eat leſs fairly than horſes, which ſtick to particular patches; while ſheep run over and nibble out the choiceſt morſels of the entire piece. They are generally kept alone, except on commons, and are, on *this* ſide of the Vale, properly confined to the uplands, the moſt natural paſture of ſheep.

With regard to the aggregate QUANTITY OF STOCK, ſuitable to a *given piece of ground*, huſbandmen, here, as in other places, differ in their opinions. Extremes are moſtly injudicious. The impropriety of ſtocking too *thin* has already been ſhewn; but laying on ſtock too *thick* is a ſtill greater impropriety. Broken graſs may be mown for hay; but the evils of overſtocking are not eaſily repaired: ſtock once checked do not readily regain a thriving habit. I have known (not in this District) the entire produce of the land thrown away by overſtocking: it is an error which novitial farmers too frequently fall into. The middle way ought to be attentively

tively ſought after. Nothing but experience, on the given ground, can point it out. In obtaining this experience, it is always prudent to begin on the ſafe ſide; or, in other words, to underſtock, rather than overſtock, the firſt year.

3. SUMMER MANAGEMENT OF PASTURES. In this department of the graſs land management, the Diſtrict under ſurvey is deficient. No *ſhifting* of ſtock; no head ſtock and *followers*; nor *ſweeping* of paſtures, with the ſithe. In the ordinary practice of the country, ſtock are turned into paſture grounds, at Mayday, and there remain impounded, until Michaelmas; or until harveſt be in; when the head ſtock are transferred to the mowing grounds, and the ordinary ſtock to the ſtubbles, to partake of the "average:" a provincial term for the eatage of arable land, after harveſt; a term probably originating in the ancient commonfield management.

I have already intimated, that it is not my intention to make the preſent a didactic work. Nevertheleſs, where I find what appears to me cauſe of cenſure, it may be right to mention what I think would be a means of doing it away.

General Remarks on the Management of Summer Pastures.

The graſsland management is no longer a ſubject which is new to me. I have now had a conſiderable ſhare of experience, in my own practice, and have alſo had opportunities of obſerving, on a large ſcale, the practice of others, in different and diſtant Diſtricts. I will therefore give, here, in as few words as poſſible, a *ſketch* of my preſent ideas, reſpecting the proper management of SUMMER PASTURES.

Much depends on SITUATION, and much on WATER. There are caſes (many of them in this Diſtrict) in which the ſtock are, through neceſſity, confined during the ſummer in *one* graſs pound. Caſes like theſe can only be lamented, not remedied. There are others which will admit of only *two* diviſions; that is, of *one ſhift:* a predicament infinitely preferable to the firſt; but not altogether deſirable.

In all caſes, where fatting cattle or dairy cows make a part of the ſtock, and where ſituation, ſoil, and water will permit, every ſuite of grazing grounds ought, in my idea,

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to conſiſt of THREE COMPARTMENTS. One for head ſtock (as cows or fatting cattle), one for followers (as rearing or other lean ſtock), and the third to be ſhut up to freſhen for the leading ſtock.

If, at the time of ſhifting the followers, there be *much ſeedy herbage* left upon the ground, it ought to remain until they be ſhifted; and to be MOWN AS HAY during the receſs.

But if, at that time, a *few weeds*, and a *little ſeedy herbage* only be left, they ought to be SWEPT down, with the ſithe, a few days before the removal of the lean ſtock; which will not fail, in this caſe, to lick up even the ſharpeſt thiſtles, while they are in the ſoft flaccid ſtate, to which mowing preſently reduces them.

Finally, I am clearly of opinion, that, let the paſture conſiſt of one, two, or more compartments, not a weed ought to *ſeed*, nor a tuft of *ſtale graſs* be ſuffered to ſtand, in a paſture ground; which ought once, at leaſt, during the ſummer, to be LEVELLED WITH THE SITHE; thus, at a ſmall expence, converting WEEDS INTO NUTRIMENT, and WASTE GROUND INTO AFTERGRASS.

HORSES.

27.

HORSES.

Introductory Remarks.

YORKSHIRE has long been celebrated for its horſes. Fitzherbert, who wrote two hundred and fifty years ago, mentions his going to Rippon fair, to buy colts.

The influence of *climature*, on the *conſtitution*, or *changeable* part of the nature of animals, is a matter difficult to be demonſtrated. There are men who deny it.—Nevertheleſs, ſtrong evidences of its exiſtence may be drawn, from the animal under conſideration.

No man has yet been able to breed *Arabian* horſes, in England; *Engliſh* horſes, in France or Germany; nor *Yorkſhire* horſes, in any other Diſtrict of England. Some good horſes, no doubt, are bred every year, in different parts of the kingdom; but they are few, in proportion to the number of bad ones bred, in thoſe parts.

In

In Norfolk, the breeding of ſaddle horſes has been repeatedly attempted, without ſucceſs. Yorkſhire ſtallions have been, and ſtill are ſent, into Norfolk, in the covering ſeaſon. The *foals* may be handſome, *but they loſe their form as they grow up.*

On the contrary, in Yorkſhire, let the foal, when dropt, be ever ſo unpromiſing, it will, if any true blood circulate in its veins, acquire faſhion, ſtrength, and activity, *with its growth.*

Theſe circumſtances *ſeem* to account for the ſuperiority of Yorkſhire-bred horſes; and furniſh an evidence, that *air*, *water*, *ſoil*, or *herbage*, has an influence on the conſtitution or changeable properties of animals.

The Diſtrict more immediately under ſurvey may, perhaps, be conſidered as the firſt, in the county, for the breeding of horſes. Nevertheleſs, it cannot, even here, be called a univerſal practice. Men are led into it by accident or caprice.

It would be difficult to aſcertain the exact number annually bred. The Vale, the Wolds, and Holderneſs, probably employ a hundred ſtallions. One hundred mares are conſidered as the full complement for one horſe.

horſe. Some of them, perhaps, do not get fifty. On this calculation, there are from five to ten thouſand horſes bred, between the Eaſtern Morelands and the Humber *.

It will now be neceſſary to conſider ſeparately,

1. The breed.
2. The method of breeding.
3. The method of making-up.
4. The markets.
5. The management of worked horſes, in this Diſtrict.

1. BREED. Thirty years ago, STRONG SADDLE HORSES, fit for the road only, were the principal breed of the Vale.

During the laſt twenty years, ſome capital HUNTERS have been bred in it. This change was principally effected by one horſe, JALAP; a full-bred horſe; whoſe pedigree and performances are well known upon the turf.

He is ſtill living; and, what is remarkable, laſt ſeaſon, at the age of thirty, covered ſeveral mares. His leap five guineas each, for

* This calculation, however, is grounded on little more than ſuppoſition. It would be difficult to aſcertain the exact number of ſtallions kept in ſo wide a Diſtrict.

for blood mares; two guineas for "Chapmen's" mares *.

But notwithstanding the credit which the Vale has justly acquired, of late, by its hunters, the breed is, at present, changing to fashionable COACH HORSES; namely, tall, strong, oversized hunters. The breed, therefore, may be said to have increased in size, rather than to have undergone a change. In 1783, the stallion shows exhibited beautiful groups of animals, active as the greyhound, and spirited as the lion. This year (1787) the shows were comparatively flat and spiritless: a mere parade of troopers.

There may be several reasons, for the alteration which is taking place, in the breed of horses in the Vale.—The *Jalapian* breed has degenerated; very few of the sons of this celebrated horse have been good stock-getters. Another reason, and perhaps a better, is the unfitness of high-bred hunters, for beasts of burden and draught. Not only brood mares, but growing horses, are used in husbandry. The operation of plowing with two horses requires strength: slender horses are unfit for it; but a three or four-year

* He died in December 1787, since this article was written.

year old coach horſe may be occaſionally uſed; and, in caſes of deformity or lameneſs, may be continued as a farm horſe. If to this be added, the extravagant prices which this deſcription of coach horſes have recently borne, the Vale farmers may be right in propagating the breed *.

Let this be as it may, they are moſt aſſuredly wrong, when they give encouragement to the *Fen Breed*, the "Howden mack" of BLACK CART HORSES, which I am ſorry to ſee worming their way, into the Vale. The breed of grey rats, with which this Iſland has of late years been overrun, are not a greater peſt in it, than the breed of black fen horſes: at leaſt, while cattle remain ſcarce, as they are at preſent; and while the fleſh of horſes continues to be rejected as an article of human food.

Let the Vale farmers continue to plow with coach horſes, and uſe oxen in carriage: a breed of horſes better calculated for eating than working, and whoſe tendency is to render their drivers as ſluggiſh as themſelves, are ill adapted to the preſent rents of the Vale. Norfolk has already experienced the evil

* The WOLDS and HOLDERNESS have been longer in the practice of breeding coach horſes.

evil consequences of encouraging that breed; and I hope this country will not suffer by the same indiscretion. It is laughable enough to see a slender half-bred mare, who perhaps, a few years ago, received the embraces of *Jalap* or his offspring, bending under the weight of a cumbrous animal, whose very legs, in all their admired roughness, are nearly equal in size to the body of her former gallant. No wonder that monsters, having not their likeness in nature, should be the produce of such unnatural amours.

II. BREEDING HORSES. From what has been said respecting the superiority of Yorkshire horses, it will, no doubt, be expected that great attention is paid to breeding; and that the mysteries of it will be disclosed; while, perhaps, others have conceived that their superiority is more owing to the art of breeding, than to the geniality of climature. I should be sorry if truth oblige me to discover the misjudgment of my readers; and feel myself awkwardly circumstanced in being under the necessity of disclosing the misconduct of my countrymen.

In different parts of the kingdom, the breeding of *race horses* is reduced almost to science. In the Midland counties, the breed-

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ing of *cart horſes* is attended to with the ſame aſſiduity, as that which has of late years been beſtowed, on cattle and ſheep; while the breeding of *ſaddle horſes*, *hunters*, and *coach horſes*, is almoſt entirely neglected; is left almoſt wholly to chance; even in Yorkſhire! I mean as to FEMALES. A breeder, here, would not give five guineas for the beſt brood mare in the kingdom;—unleſs ſhe could draw, or carry him occaſionally to market; nor a guinea extraordinary for one which would do both. He would ſooner breed from a rip, which he happens to have upon his premiſes; though not worth a month's keep.

But how abſurd. The price of the leap, the keep of the mare, and the care and keep of her progeny, from the time they drop to the time of ſale, is the ſame, whether they be ſold from ten to fifteen, or from forty to fifty pounds each.

Superior excellency may be ſaid to depend upon the MARE. There is an inſtance, in this neighbourhood, of the offspring of one mare being ſold, *to dealers*, for four or five hundred pounds. What are a few guineas in the firſt purchaſe of a good mare? and what are a few days plowing, or a few rides to market,

market, compared with the difference between a race of good and of ordinary horſes?

It appears to me evidently, that much remains to be done, in this department of Rural Economy. Good STALLIONS may be had for money; and the different hunts, in the ſouth of England, will, ſo long as they remain, be a ſource of MARES, moſt ſuitable to the purpoſe of breeding CAPITAL HUNTERS. Mares lamed, or ſtiffened by ſevere exerciſe and improper treatment, are generally to be bought, in the neighbourhood of theſe hunts, at moderate prices. And mares, fit for the breeding of COACH HORSES, are to be met with in every county.

The preſent prices, given for hunters and coach horſes, and, more eſpecially, the declenſion of the breeding of the former, are incitements ſufficient, to induce men of ſpirit to make an attempt. Nothing appears to me to be wanting, but a BAKEWELL, to take the lead.

While the nation remains in its preſent ſtate of refinement, horſes for the *road* and the *field* are in a degree neceſſary; but *racers* and *cart horſes* might, with leſs inconveniency, be diſpenſed with.

The King's Plates have probably had their uſe, in improving the Engliſh horſe, in activity and fleetneſs. But the original intention of them has long ago been anſwered: RACE-HORSES are now fit for the purpoſe of *amuſement*, only. They are, in general, drawn much too fine for *uſe*. Therefore, to continue theſe prizes will be diſtributing the public money, toward the worſt of purpoſes: the encouragement of gaming; and the injury of the breed of Engliſh horſes. The broad-loined, deep-cheſted, old Engliſh hunter has given place to the lank feeble racer. If it ſhould be ſtill thought proper to continue the King's Plates, it would certainly be wiſe to increaſe the limited weight.

With reſpect to CART HORSES, if extending the ſaddle-horſe TAX, to farm horſes in general, would leſſen their number, and increaſe that of working oxen, it would be political to extend it, without loſs of time.

Under the preſent head, it may be proper to regiſter an idea, which I have met with in this country, and which, evident as it may ſeem, never occurred to me before, either in theory or practice.

It is a fact, well eſtabliſhed in the common practice of this Diſtrict, that ſpayed heifers

work

work better, and have in general *more wind*, than oxen; and it is not doubted that SPAYED MARES would have an equal preference to *geldings*.

I do not, however, find that the experiment has ever been tried. The reaſon held out againſt it, though formidable at firſt ſight, proves a mere ſhadow on examination. The ſpaying of fillies would undoubtedly ſpoil them for *brood mares*. But does not the gelding of a colt ſpoil him for a *ſtallion?* What breeder, when his mares foal, wiſhes for fillies? and what dealer would not willingly give halfacrown, for each, to have his mares changed into geldings? or perhaps into animals ſuperior to geldings?

In the ſpring of the year, *open mares* are faint and troubleſome. The only requiſites appear to be a ſafe cutter, and a man of ſpirit to ſet him to work, to bring the ſpaying of female foals into common practice.

It does not follow, that becauſe a part of the female foals ſhould be cut, there would not be open mares to breed from, more than it does, that becauſe ſome heifers are ſpayed for the yoke, or for fatting, there are not cows ſufficient, for the purpoſes of breeding and the dairy.

I do not mean to *recommend* a practice of which I have had no experience; but if the experiment has not been tried, it ſtrikes me, forcibly, that it is worth the trial; and that it is more than time it were ſet about *.

III. MAKING UP HORSES. The AGE, at which young horſes are here made up for a market, is four or five years old.

Some BREEDERS *make-up* their own horſes; others only *back* them, and perhaps uſe them gently, in *harneſs*; ſelling them, at full age, to PROFESSIONAL DEALERS; who, with arts beſt known to themſelves, make them fat and fine-ſkinned—ſet up their tails—abridge occaſionally the number of their teeth,—and teach them their ſtable exerciſe.

Some are bought up, at two or three years old, by HORSE-DEALING FARMERS; who *grow* them upon good land; break them into the ſaddle, at leaſt; and finally make them up, *according to art*, for market.

One farmer in the Vale is ſaid to make-up an hundred, annually. And one dealer, at Malton, is ſaid to have ſometimes two or three hundred horſes in his ſtables, at once.

Making-

* Since the firſt publication of this Volume, I met with an inſtance of practice, in the ſpaying of mares, which will be mentioned, in the SOUTHERN COUNTIES.

Making-up horſes, upon a FARM, by a man who is a judge, is a moſt profitable branch of huſbandry. Oats, hay, and ſtraw, find a market on the ſpot; and *town* manure is procured, in quantity, without the expence of fetching.

IV. MARKETS FOR HORSES. *Malton* has the only HORSE SHOW in this Diſtrict. It is held in the ſpring of the year, and continues for a week; namely, the week before Palm Sunday.

At this fair, great numbers of made-up horſes are ſold. They begin to go in, on Monday: Tueſday and Wedneſday are the principal days, for good horſes: Thurſday and Friday generally exhibit an inferior ſort: and Saturday, which is likewiſe a great cattle fair, is principally a ſtallion ſhow, and a fair for refuſe horſes; which, on this day, are ſhewn in the open market.

During the week days, the horſes are ſhewn in ſtables; fitted up, at the inns, and in private yards, for the purpoſe; being only led out, occaſionally, at the deſire of the chapman.

The hours of ſhow are the morning before breakfaſt, the forenoon, and again in the

evening; the ſtables being conſtantly ſhut during meal times.

The ſhow conſiſts of well bred hunters, inferior ſaddle horſes, and light coach horſes; moſt of them being bred in the Vale, on the Wolds, or in Holderneſs; ſome few come from Cleveland, and the upper part of the Vale of York.

The purchaſers are the *London* and *Weſt of Yorkſhire dealers*, and *foreigners*; eſpecially of FRANCE and PRUSSIA.

In 1783, the French markets being then recently opened by the peace, ſeveral French dealers were at this ſhow. The favorite colors were yellow bays, greys, and cheſnuts. Brown, the Engliſhman's favorite color, is diſliked by foreigners.

But, of late years, the principal part of the firſt-rate horſes have been bought by the dealers, foreign and domeſtic, *previouſly to the ſhow*, at the houſes of the country dealers, or the breeders.

The prices are various: from fifteen to fifty pounds includes the majority of the made-up horſes, ſold at Malton ſhow. They are led, in ſtrings, to London, or ſhipped off, at Hull, for foreign markets. In 1783, a veſſel laden with horſes, bought at this ſhow and

and in the neighbourhood, was loſt off the coaſt of Yorkſhire.

V. TREATMENT OF WORKED HORSES. In a Diſtrict where the working of oxen has been, for many ages, the eſtabliſhed practice, it cannot be expected that any very accurate management of DRAUGHT HORSES can have taken place. But, in a country which has always been conſidered as the ſource of good HUNTERS, and the ſchool of good horſemanſhip, it may be reaſonably ſuppoſed, that a ſuperiority of management prevails.

This, however, is not, from what I have ſeen, the caſe. The only ſtriking feature of management, which has caught my notice, is, that of turning hunters, and other hard-ridden horſes, out into the field in the day-time, in winter; cold or warm, and ſometimes wet or dry: a practice which has been cried up by many great horſemen, and is to be met with in every part of the kingdom; though nowhere ſo prevalently, perhaps, as in this country.

It has always ſtruck me as a bad practice. Nevertheleſs, in compliance with the cuſtom of the place I was in, I let a mare, which I rode into the country in 1782, run out to

graſs, on leiſure days, and lie in the houſe, at nights. The conſequence was unfavorable, and ſufficiently ſtriking to induce me to minute the circumſtances, at the cloſe of the occurrence.

As the ſubject appears to be of conſiderable importance, I will here copy the Minute.

"1783, *March* 11. There are, perhaps, few horſes which will bear to be hunted, one day, and turned out to graſs the next. My brother's practice is to let his horſes run at graſs, in the middle of the day, throughout winter. In conformity with this plan, mine was turned out in the daytime, whenever I did not want to uſe her. On my arrival here, in November laſt, though I had rode her a journey of two hundred miles, ſhe was as fat as a mole, and her carcaſe round as a barrel. In the early part of winter, I rode her a good deal, and ſhewed her the hounds, generally once a week. With this exerciſe, I was not ſurpriſed at her ſhrinking. But having more lately given her eaſe,—in order that ſhe might recover her fleſh and ſpirits,—without finding any alteration, I had good reaſon to think that it was not altogether the work, but the treatment, which kept her down; for, with all

all the indulgence I could give her, her ſides, ten days ago, were clapped together, and her hide ſtuck as cloſe to her ribs, as if it had been glued to them. Her appetite for dry meat at leaſt was gone. She would let her corn lie in the manger untouched; though for the time I have had her—ſix years—ſhe has ever been a remarkable good feeder. I had ſome blood taken from her, but ſhe ſtill remained the ſame. Suſpecting that hanging after the graſs was the only cauſe of her ill thriving, ſhe has for the laſt ten days been kept entirely in the houſe. Her ſkin is already looſe and ſilky, and ſhe calls for corn every time the ſtable door is opened. The other day ſhe wanted ſpurs. Now ſhe is all ſpirits again. — — turned out a mare, which he had hunted the day before, to graſs, on a cold day. She got a violent cold; was ſeized of her limbs; and it has been with great difficulty he has ſaved her. — — began to turn out a valuable mare, which he hunted occaſionally; but finding that ſhe refuſed her dry meat, he diſcontinued it; and now finds that ſhe has taken to her hay and corn, again. My brother's horſe, uſed to it as he has been from his infancy, and pampered as he conſtantly

ſtantly is, looks more like a common hack than a hunter.

" There are two reaſons why a horſe, which is ſubjected to violent exerciſe, ſhould not be expoſed at graſs, in ſevere weather. It takes them off their dry meat; and horſes, which ſweat much, are, it is highly probable, more chilly, ſuffer more from pinching cold, and may be more liable to be ſeized by acute diſorders, than horſes which have more moderate exerciſe, and whoſe frames are leſs relaxed. A horſe which has been enured to thoſe tranſitions of heat and cold will, no doubt, bear them better than one which has always been uſed to a warm ſtable; and which, certainly, ought not to be expoſed to ſuch dangerous treatment, without the greateſt precaution.

" I am nevertheleſs of opinion, that letting a horſe run out, in winter, keeps his legs cleaner and more ſupple than ſtanding always in the ſtable. My mare was not freſher on her legs, at four years old, than ſhe has been this winter. And if hunters could be turned out, on leiſure days, when the weather is tolerably fine, into a ſpacious place to hay and corn, without graſs, I am of opinion it would

would be of great ſervice to them. Horſes which are unavoidably expoſed to tranſitions from heat to cold—as hunters frequently are, in ſauntering by the ſide of a cover, after a hard run—ought, indiſputably, to ſtand in a cool ſtable, and to be expoſed to the open air on leiſure days, ſo far as the ſtate of perfect *health* and *vigour* will permit: *but no farther*."

I make no comment on the foregoing facts and reflections. I inſert them as a caution to the inexperienced: and as hints to thoſe who wiſh to hit the HAPPY MEDIUM of treatment.

TURNING OUT HORSES TO GRASS IN THE SPRING. I met with an idea, in this Diſtrict, reſpecting the firſt turning out of a horſe entirely to graſs, which deſerves to be generally known.

When a horſe is thrown up, or turned out at nights to graſs, in the ſpring of the year, it is common to chooſe the *forenoon* of a *fine day* to do it in. The natural conſequence is, the horſe fills his belly, during the *ſunſhine*, and lays down to reſt, in the *cold of the night*; thereby, probably expoſing himſelf to diſorders.

A much

A much better practice prevails, here. The horſe, inſtead of being turned out in the morning, is turned out *at bed-time*. The conſequence is, he *eats all night*, and ſleeps in the ſunſhine of the next day *.

28.

CATTLE.

Introductory Remarks.

IN A SEQUESTERED Vale, abounding with GRASS LAND, cattle may be expected: they are the moſt natural ſtock.

In the unincloſed ſtate of this Vale, the Commons and Cars were applied, chiefly, to the rearing of WORKING OXEN, and a few DAIRY COWS. In the Weſt Marſhes, and other central parts of the Vale, which have been

* It is generally underſtood here, that HORSES AT GRASS do not require WATER. They are frequently kept, for months together, in dry upland paſtures, without water, and without any apparent inconveniency.

been inclosed, time immemorial, and which, until of late years, have always lain in a state of rough grass, great numbers of YOUNG CATTLE were reared, for sale.

Converting the lower lands to arable, inclosing the Commons, and laying the arable fields to grass, have wrought a considerable change, in what may be called the ECONOMY OF LIVE STOCK; more especially in the ECONOMY OF CATTLE. DAIRIES have increased; GRAZING has been introduced; and REARING has declined.

Thus far, however, the Vale may be said to have reared its own stock; excepting some few SCOTCH CATTLE, which are annually brought into it, for the purpose of clearing rough pastures in winter; and to be fatted on secondary grazing grounds, the ensuing summer.

To give an adequate idea of the nature and management of cattle, in this District, it will be proper to divide the subject into four principal divisions: namely,

1. The Species, or breed.
2. Breeding Cattle.
3. Rearing cattle.
4. Fatting cattle.

I. BREED.

I. BREED. Within the memory of a perſon now living; namely, about ſeventy years ago; the ancient breed of BLACK cattle, which probably once prevailed throughout England *, and whoſe name is ſtill very improperly uſed in ſpeaking of cattle in general, were the only breed of cattle, in this Diſtrict. By deſcription, they appear to have reſembled the preſent breeds of Wales and the Weſt of Scotland: moſtly "*all black*;" but ſome with "*white faces*:" moſtly "*horned*;" but ſome of them "humbled;" that is *hornleſs*.

To theſe ſucceeded a BLACK AND WHITE breed; probably a *variety* of the original ſpecies. But ſtill the "*red cow's milk*" was conſidered as *medicinal*: and many inveterate diſorders were doubtleſs cured with it: that is to ſay, by a perſeverance in milk diet.

The black mottles, probably a tranſient ſort, were ſucceeded by the LONGHORNED or "Craven breed:" the probable origin of the preſent celebrated breed of the Midland counties.

But, in a country where the buſineſs of aration was carried on principally by *oxen*, this breed was found extremely inconvenient. Horns a yard long were not only troubleſome,

* But ſee WEST OF ENGLAND, Art. CATTLE.

ſome, but dangerous, in yoke; eſpecially in the narrow roads and hollow ways, with which the Diſtrict formerly abounded. Accidents were frequently happening to them; by getting their horns entangled in the hedge or the bank; ſometimes breaking off their horns; but more frequently breaking their necks.

This was a ſufficient inducement for adopting the SHORTHORNED or "Holderneſs breed:" probably of *Dutch* extraction. This change took place ſome forty or fifty years ago: and the ſhorthorned breed ſtill prevails; though it has undergone ſeveral alterations, ſince its firſt introduction.

The firſt variety of this ſpecies of cattle, which I can recollect, was a thick, large-boned, coarſe, clumſy animal: remarkably large behind, with thick gummy thighs. Always fleſhy, but never fat; the *fleſh* being of a bad quality. This, however, was not the worſt: the *monſtrous* ſize of the buttocks of the calf was, frequently, fatal to the cow. Numbers of cows were annually loſt, in calving. Theſe monſters were ſtigmatized with the opprobrious epithet "*Dutch a—d.*" This was probably the worſt breed the Vale ever knew.

The

The unprofitableneſs of the "Dutch breed" being evident, men of diſcernment began to ſet about IMPROVING it. In the courſe of the laſt twenty years, the bone has been lowered, the hind quarters reduced, and the fleſh and fatting quality very much improved; not by foreign admixtures and unnatural croſſings, but by chooſing the cleaneſt and beſt-fleſhed bulls and heifers, from among their own or their neighbours ſtock.

It is very obſervable, however, that in effecting this improvement, the *horn* has been conſiderably *lengthened*; the preſent prevailing breed appearing as if it were a croſs, between the old ſhort horizontal horn—(provincially, "buckle-horns")—and the middle elevated horn of Herefordſhire and Eaſt Suſſex: not, perhaps, from either of theſe breeds having been employed in the improvement, but merely from the circumſtance of a "fine horn"—namely, a clean, ſmall, ſharp well turned horn—having been *faſhionable*, for the laſt twenty years.

This ſhews how much the appearance, as well as the nature or conſtitution, of a given breed of ſtock, may be altered and improved, without calling in the aſſiſtance of *alien breeds*.

Even

Even the Dutch buttocks were probably *bred* in England.

The Holderneſs breed, on their firſt introduction into the Vale, were ſaid to be *thin-quartered*, too light behind, and too coarſe before; large ſhoulders, coarſe necks, and deep dewlaps. This form being found diſadvantageous to the butcher, encreaſing the quantity of the coarſer parts, and reducing the weight of the prime pieces, the breeder endeavored to enlarge the hind quarters; and had he ſtopped when he had got to the *happy medium*, he would have wrought a good work. But the faſhion was ſet;—"cloddy" bullocks were in eſtimation; and their evil qualities were overlooked, until they were rendered too obvious; and the conſequences above mentioned had taken place.

The *form* and *ſize* of the PRESENT BREED OF THE VALE may be ſeen, in the following dimenſions of a working ox, riſing five years old; above par as to form, but ſomewhat beneath it in point of ſize.

Height, at the withers, four feet eleven inches.

——— of the briſket, from the ground, twenty inches.

Smalleſt girt, ſeven feet four inches.

Largeſt girt, eight feet five inches.
Greateſt width, at the ſhoulder, twentytwo and a half inches.
——— at the hips, twentythree and a half inches.
——— at the round-bone, twentyone inches.
Length from forehead to nache, eight feet five inches.
——— the center of the ſhoulder-knob to the center of the hip bone, four feet one inch.
——— the center of the hip bone, to the extremity of the nache, twentytwo inches.
Length of the horns, fourteen inches.
Width of the horns at the points, twentytwo inches.
The eye full and quick.
The head and neck clean.
The bone ſomewhat large.
The chine and buttocks full.
The fleſh ſoft and mellow to the hand.
The color blood-red, marked with white.

But a variety, new to the Vale, is now creeping into it: the TEES-WATER BREED; —a variety of the ſhorthorned breed. This variety is eſtabliſhed on the banks of the Tees.

Tees, at the head of the Vale of York, and is held out as the "true Yorkſhire ſhort-horned breed." Be this as it may, much attention has been beſtowed on its eſtabliſhment; and it appears to be, at preſent, a moſt valuable breed of cattle: valuable, I mean, to the *grazier* and the *butcher:* the bone, head, and neck fine; the chine full; the loin broad; the carcaſe, throughout, large and well faſhioned; and the fleſh and fatting quality equal, or perhaps ſuperior, to thoſe of the preſent breed of the Vale; which, however, appear to be more *active*, more *athletic*, and fitter for the *yoke* or *harneſs*.

In forming that variety, a horn, very different from that which is prevalent in the Vale, has been produced. The "buckle-horn" is, in this caſe, as in the other, ſomewhat lengthened; but the *faſhionable* horn, on the banks of the Tees, is a clubbed down-hanging horn, as if, in forming it, a daſh of Craven blood had been thrown in. And it might be made a moot point; whether the horns of the two breeds, now particularly under notice, have been produced by faſhion alone; or whether the Teeswater horn may not have been altered, from the original ſhort horn, by a ſlight intermixture of the Craven

breed; and whether the Holderneſs breed, from which the Vale cattle have indiſputably originated, may not have had a ſimilar admixture of the middlehorned blood *.

I wiſh to trace the origin and progreſs of the different breeds of cattle in the Iſland; but I find it will be a difficult taſk to do it with ſtrict accuracy †.

The HORN is the beſt criterion for diſtinguiſhing the different *ſpecies* (if the term be applicable) of cattle. It is a PERMANENT SPECIFIC CHARACTER. The *color*, though not altogether accidental, is changeable; and neither the *form* nor the *fleſh* are permanently characteriſtic

* 1796. The circumſtance of "red cow's milk" being drank medicinally, implies the preſence of red cattle. Admitting that theſe red cattle were of either of the breeds abovementioned, (that is to ſay, of the native red breed of the ſouthern parts of this Iſland, ſee WEST OF ENGLAND) and that they were mixed with the imported breed, it readily follows, that the change which has recently taken place, has been effected, merely, by reſtoring part of the original blood.

After having examined, with ſome attention, the ſeveral breeds of the Iſland, this appears to me the moſt ſatisfactory manner of accounting for the ſtriking reſemblance, between individuals of the breed under notice, and thoſe of the breeds of Herefordſhire and Eaſt Suſſex.

† 1790. See WEST OF ENGLAND, Art. CATTLE, for a more enlarged View of this ſubject.

characteriſtic of any particular ſpecies. Good form and good fleſh may be found, in every ſpecies; though they are by no means equally prevalent, nor equally excellent, in all. But a horn ſix inches long was never yet produced by the Craven breed; nor one a yard long by the Holderneſs breed. And the middle-horned breed of Herefordſhire, Suſſex, and other parts of the Iſland, appears to be as diſtinct a *ſpecies* as either of the former.

Theſe are my only reaſons for being ſo minutely deſcriptive of the horns of cattle. I am not a BIGOT to horns of any ſhape or length. I would as ſoon judge of a man's heart by the length of his fingers, as of the value of a bullock by the length of his horns.

If his *fleſh be good* and *well laid on*, and his *offal be proportionably ſmall*; if he *thrive well*, *fat kindly at an early age*, or *work to a late one if required*; I would much rather have him entirely *without horns*, than with *any* which ENTHUSIASM can point out.

The doctrine of horns has long appeared to me as a ſpecies of SUPERSTITION, among *Farmers*, and as a CRAFT, convenient to *leading breeders*, in eſtabliſhing their reſpective *ſyſtems*.

But leſt I ſhould have cauſe to repent of my raſhneſs, in ſpeaking thus irreverently of horns, I will here allow them all the merit which, in my opinion, truth entitles them to.

The horn has been mentioned as a permanent ſpecific character of cattle. Hence, in varieties, it may have its uſe, as a criterion. Thus, ſuppoſing a male and female of ſuperior form and fleſh, and with horns reſembling each other (as nearly as the horns of males and females of the ſame variety naturally do), no matter whether ſhort or long, ſharp or clubbed, riſing or falling; and ſuppoſing a variety to be eſtabliſhed from this parentage, it is highly probable, that the horns of the parents would continue to be characteri ic of the *true breed*, and might, by inferior judges, be depended upon, *in ſome degree*, as a criterion.

But it is indiſputable, that horns remain the ſame, while the fleſh and fatting quality change; and every man of ſuperior judgement will depend more upon the form and *handle* of the carcaſe, than upon the length and turn of the horn. For it is a notorious fact, that the individuals of a given variety may

may have exactly the ſame horns, without having exactly, either the ſame faſhion, or the ſame fleſh.

If there be any criterion or *point* of cattle, which may be *univerſally* depended upon, as a guide to the grazier, it is the EYE, not the horn. The eye is a mirror, in which the *health* and *habit*, at leaſt, may be ſeen, with a degree of certainty.

II. BREEDING. From the foregoing view of the breeds of cattle, in the Vale, it appears, that conſiderable attention has long been paid to the art of breeding; and it has increaſed much of late years.

1. BULLS. A BULL SHOW has lately been eſtabliſhed, in Eaſt Yorkſhire: a prize medal being awarded to him who produces the beſt young bull: an admirable inſtitution, which will doubtleſs be of laſting benefit to the country.

In the Vale, there is an inſtance of a gentleman (Mr. HILL of Thornton) keeping one of the beſt of theſe ſhown BULLS, for the uſe of his tenants: a liberal practice which might well be adopted, by other country gentlemen; and, more particularly, by men of large eſtates.

2. BREEDING Cows. This ſubject requires to be ſubdivided into,

1. Rearing.
2. Purchaſing.
3. Treatment.
4. Diſpoſal.

1. *Rearing.* It has already been ſaid, that the Vale ſtill continues to rear its own ſtock. The rearing of *cows* will appear, in the next ſection, under the general head REARING CATTLE.

2. *Purchaſing Cows.* Though a dairyman may in general rear his own cows, he muſt be fortunate indeed, if he never have occaſion to purchaſe a cow.

The favorite *points* of a milking cow, here, are a thin thigh, a lank thin-ſkinned bag hanging backward, teats long, and ſufficiently free of milk without ſpilling it, dug veins large, and horns yellow. I will not vouch for the infallibility of *all* theſe points; but this I can ſay, that I never noticed a cow, with a thick fleſhy thigh, which was a good milker.

The *dimenſions* of the handſomeſt cow, I have ſeen, of the true Vale breed, riſing five years old, and within a few months of calving, are as follow:

Height

Height at the withers, four feet five inches.
——— of the briſket, eighteen and a half inches.
Smalleſt girt, ſeven feet one inch.
Largeſt girt, nine feet two inches.
Width at the ſhoulder, twentyone and a half inches.
——————— hips, twentyfour inches.
——————— roundbone, nineteen inches.
Length from forehead to nache, ſeven feet five inches.
——————— the center of the ſhoulderknob to the center of the huckle, three feet eleven inches.
——————— the center of the hip bones to the out of the nache, twentyone inches.
Length of the horns, ten inches.
Width at the points, eighteen and a half inches.
Head, neck, and leg, *fine* and *clean*.
Chine full, and back level.
Color, a darkiſh red, mottled with white.

3. *Treatment of Cows.* Here, as in all countries where grazing gives place to the dairy, milked cows are indulged with the beſt the farm will afford. The beſt land for paſture, in ſummer; the head of the fog, in autumn; and, generally, hay moſt of winter.

This

This practice has already been noticed. If the preſent breed of cows require hay, when they give no milk, it is a depreciation of their value as milking cows.

Be this as it may, there is certainly one diſadvantage of the Vale breed of cows, which, I believe, is common to all the varieties of the ſhorthorned breed. This is their *difficulty in calving*. For, notwithſtanding the *fleſhineſs* of the hind quarter has been ſufficiently done away, the *bones* ſtill remain. The loin is ſtill broad, and the hips ſtill protuberate; perhaps too much, either for ſeemlineſs or uſe.

An improper treatment of the cow may encreaſe the difficulty. A cow can ſcarcely be too low in fleſh, a month before ſhe calves. Good keep, three weeks or a month before calving, gives due ſtrength and a fluſh of milk. The cauſe may be difficult to point out with preciſion; but the effect is well aſcertained.

It is a fact, that ſhorthorned cows ſeldom calve without *aſſiſtance*. The hour of calving is watched, with obſtetric ſolicitude; the perſon who has the care of them frequently riſing in the night, and ſometimes ſitting up with them, the night through. From conſtant

ſtant obſervation, however, a ſkilful dairyman will judge, at bedtime, the hour of calving, ſufficiently near, to know whether it will be neceſſary for him to riſe, before his uſual hour.

4. *Markets for Cows.* Milking cows are moſtly ſold, at the neighbouring fairs, *with calves by their ſides.* Sometimes, but not frequently, they are ſold as *incalvers.* The medial *price* of a cow and calf, on a par of the laſt ten years, has been ſeven to nine pounds.

Dry cows—provincially, "drapes"—are either ſold, at the fairs, to jobbers, who buy them up for the Midland or South-of-England graziers, or are fatted, on the dairy farm, with aftergraſs, turneps, &c.—The medial *price* of a lean "drape," of the Vale breed, on a par of the laſt ten years, has been five to ſix pounds.

III. REARING. This department of the ſubject is naturally broken into three ſtages; rearing cattle requiring different kinds of treatment, at different ages.

1. CALVES. 1. *Time of rearing.* Candlemas to Old Ladyday.

2. *Points of a rearing Calf.* The *form* I paſs over, in this place, as not having met with

with an accurate definition of it, in this country; where the *blood* and the *color* ſeem to be more attended to, by breeders in general, than the form.

A "*raw noſe*;" that is, a *white muzzle*, with noſtrils red on the inſide, is conſidered as a bad mark; portending a tender animal: on the contrary, a black or brown muzzle, with dark-colored noſtrils, is eſteemed a ſign of hardineſs.

A calf *entirely white* is generally rejected, under a notion that white cattle are of a tender nature; that they are peculiarly ſubject to louſineſs; and that they are diſliked by their aſſociates! The fineſt ox, I ever knew, of the Holderneſs breed, was *white*. The fineſt ox, I ever ſaw, of the Teeswater breed, was *white*. One of the fineſt cows, now in the Vale, is *white*. Nevertheleſs, valuable calves are annually ſent to the butcher, merely becauſe they are *all white*. The ſmalleſt ſpeck of color; even the tip of an ear, red or black; ſaves them from proſcription: under a notion, no doubt, that it hardens their nature; defends them from lice; and renders them acceptable to their companions: a vulgar error, which is not confined to this Diſtrict;

Diſtrict; but which ought, in my opinion, to be univerſally exploded *.

3. *Caſtrating Calves.* OXEN, in this country at leaſt, are ſubject to a ſtoppage in the inteſtines; owing, it is believed, to the "blood ſtrings" of the teſticles being left in the body, at the time of caſtration. The fact ſeems to be, that the diſorder is generally cauſed, by a link of the inteſtines being thrown (in playing, it is ſuppoſed) acroſs a cord or membrane, in the hind part of the abdomen; and the cure is radically effected, by breaking it: an operation which is not unfrequently performed †.

If

* 1796. The wild Cattle of Chillingham Park, in Northumberland, are uniformly white; except the inſides of their ears, which are of a brown color.

† I remember to have once ſeen this operation; and have lately heard it minutely deſcribed, by a perſon who has repeatedly performed it. It is ſimple and ſafe. An orifice, large enough to admit the hand, being made in the coats of the abdomen— on the near or left ſide—(between the ribs, the huckle, and the flank) the inteſtines are drawn forward into their natural ſituation, and the ſtring broken: otherwiſe, the animal is liable to a repetition of the ſame diſorder. The ſymptoms are reſtleſſneſs, with attempts (but not violent, I believe) to beat the belly with the hind legs; and with a ſtoppage of the fœces; nothing paſſing through the body but a white ſlimy matter. In many places, I apprehend, this diſorder is not well underſtood; being miſtaken for ſome other internal diſorder. Death is the certain conſequence.

If the ſuſpenſion be really effected, by a ſtring of the teſticle, indexterouſly left in the calf, at the time of caſtration, much caution is requiſite in this operation.

An experienced cutter performed it thus: Having extricated the teſticle, and cut the ſeminal cord — the "nature ſtring," — he forced his finger and thumb upward, as it were into the body of the calf, (which *ſtood on its legs* during the operation) drawing the "blood ſtring" twelve or fourteen inches long: the point of it appearing, not abrupt, as if broken off; but fine as a thread, as if wholely extracted.

4. *Treatment of rearing Calves.* This differs, in the practice of different individuals. In an inſtance which, perhaps, may be conſidered as a fair ſpecimen, the treatment is this:—The calf never ſucks its dam; but has her milk, warm from the teat, given to it, twice a day, in a pail,—from the time of calving, until it be a fortnight or three weeks old. At that age, the calves begin to have half new milk and half ſkim milk, *boiled* (which is thought to be more "nouriſhing" than raw milk) for about three weeks longer: they are then put to all ſkim milk, or to milk and water, with perhaps a little oatmeal or wheat

wheat flour ſtrowed over it * ; and with hay, in the early part of the ſeaſon ; or graſs, as ſoon as ſpring puts in. In the latter end of May, or the beginning of June, according to the time of their being dropped, they are turned away to graſs and water, only, for the ſummer ; with ſometimes rape herbage, in autumn.

2. YEARLINGS. Young cattle are, I believe, invariably houſed, the firſt winter :— generally looſe ; and are indulged with the beſt hay the farm will afford. Their ſummer paſture is ſuch as conveniency will allow them : moſtly of a ſecondary nature. In the open-field ſtate, the common was their ſummer paſture.

3. TWOYEAROLD CATTLE. The ſecond winter, oat ſtraw is the common fodder of young cattle. They are generally tied by the neck, in hovels, or under ſheds. Their ſummer paſture, commons, woody waſtes, rough grounds, or whatever beſt ſuits their owner's conveniency.

At

* Sometimes, a ſmall quantity of LINSEED JELLY is mixt with thin milk and water, and is found of great ſervice ; making their ſkins remarkably ſleek and ſilky. If too much be uſed, it is liable to make them ſcour.

At two years old, the STEERS — provincially, "ſtots,"—are generally familiarized to the yoke, but are not, by good huſbandmen, worked much, at that age.

At two years old, alſo, the HEIFERS—provincially, "whies," are generally put to the bull. This, however, is not an invariable practice. In the ſtate of commonage, they were frequently kept from the bull, until they were *three* years old: now, in the ſtate of incloſure and improvement, and at the preſent high rents, they are frequently ſuffered to take the bull, when *yearlings*; bringing calves at two years old.

GENERAL REMARKS ON BRINGING HEIFERS INTO MILK.

This is an intereſting ſubject, in the management of cattle. Farmers, in every Diſtrict, differ in their opinions reſpecting it.

The arguments, for bringing heifers in, at TWO YEARS OLD, are, that they come ſooner to profit; and that farmers cannot afford, at the preſent rate of rent, to let them run, unprofitably, until they be three years old.

On the other hand, the argument, in favor of bringing them in at THREE YEARS OLD, is

is that, not being ſtinted in their growth, they make larger finer cows, than thoſe which are ſuffered to bear calves, at a more early age.

But I have not yet met with any man, who even attempts to prove, which of the two is, *upon the whole*, the more profitable practice.

The gardener ſeems to be well aware, that ſuffering a tree to bear fruit, too early, *checks its growth*; and there may be ſome analogy, in this reſpect, between vegetables and animals. But even admitting this, if the cow receive no injury, as to *thriving*, *calving*, *milking*, nor any other than that of being checked, in point of *ſize*, the objection appears to me to fall. If, however, early production check, not only the *cow*, but her *progeny* likewiſe, an objection no doubt will lie againſt it.

I have long been of opinion, that it is, *in general*, the farmer's intereſt to let his heifers take the bull, whenever nature prompts them. There is, undoubtedly, ſome preſent profit ariſing from their coming in, at an early age; and whether a middle-ſized cow may not, afterwards, afford as much *neat* profit, as one of larger ſtature, is certainly a moot point.

Much, however, depends upon KEEP. A ſtarveling heifer will not take the bull, at a year old. Nor ought any yearling heifer, which has taken the bull, ever afterwards, to be ſtinted in keep. If ſhe be ill kept, while with calf, there will be danger at, or after, the time of her calving. If afterwards pinched, there will be danger of her not taking the bull the next year.

Hence, we may infer, with a degree of ſafety, that the propriety, or impropriety, of bringing heifers into milk, at two years old, depends, principally, upon SOIL and SITUATION.

On a good ſoil, and in a genial climature, in which heifers do not experience a check, from the time they are dropt, they ought, I am clearly of *opinion*, to be permitted to take the bull whenever nature prompts them.

But, in leſs genial ſituations, where lean ill herbaged lands are to be paſtured with young cattle, it appears to me equally evident, that heifers ought not, in ſtrictneſs of management, to be ſuffered to come into milk, before they be THREE YEARS OLD.

IV. FATTING CATTLE. Although grazing has, of late years, gained ſome footing in the Vale, it does not yet fall under the deno-

denomination of a *grazing country*. A *detail* of management muſt not, therefore, be expected: and the only *incident* of practice, which has occurred to my notice, and which appears to be entitled to a place in this regiſter, is the following; at once, evidencing the propriety of *finiſhing* highly, and giving a favorable ſpecimen of the YORKSHIRE BREEDS OF CATTLE.

The ſubject of this incident is a cow, which was bred and fatted in this neighbourhood. Her dam was of the improved breed of the Vale, with an admixture of the Craven or longhorned breed. Her ſire a Teeswater bull of the firſt blood; being leaped at half-a-guinea a cow; which, twelve years ago, was a very high price.

From the time of her being dropped, ſhe was remarked as a good thriver; ſhe came in, at three years old; had one cow calf, which was reared, and three bulls, all of which died before they were three weeks old! they being ſeized, about that age, with a numbneſs in their limbs; ſoon dying with jellied joints, and ſymptoms of a general mortification. Like moſt high bred cows, ſhe milked well for a few weeks after calving;

but, afterwards, fell off her milk, and generally got to be good beef, about Michaelmas.

After her laſt calf, (in 1782) ſhe was milked until Auguſt; when ſhe was tolerable beef; worth, at the then low price of beef, about ten pounds. In autumn, ſhe had aftergraſs; in winter, turneps, hay, and oat-ſheaves (in the houſe), but no ground corn. In March 1783, ſhe was ſold for twenty pounds, to return one guinea: conſequently, ſhe paid more than ſix ſhillings, a week, for fatting.

Her dimenſions, a few days before ſhe was ſlaughtered, were theſe:

Height about four feet ſix inches (not accurately taken).

Smalleſt girt ſeven feet ſix inches.

Largeſt girt nine feet.

Length from ſhoulder-point to huckle four feet.

Length from huckle to the extremity of the nache, two feet two inches.

Width at the huckles from out to out, two feet two inches.

Her *horns* fine; of a whitiſh-grey color; ſharp; ſomewhat reſembling the Craven horn; but ſhorter; and turned upward at the points, in the middle-horn manner: her

head

head and *neck* ſmall and clean; her *legs* ſhort, and her *bone* throughout fine.

Her *points* as to fatneſs were not all of them full. Her *kernel* was ſmall, and her *ſhoulder* bare; her *fore-dug* and *flank* not extraordinary; her *chine* and *loin* were well laid up; one dimple, but not regularly cloven; ſhe was not what is called fat *upon*: but her *rib*, her *huckle*, and her *nache*, were very good; and her *twiſt* remarkable; bulging out in an extraordinary manner *.

She *proved* as follows: the quarters equal; exactly eighteen ſtones each; together ſeventytwo ſtones (fourteen pounds each); the tallow eight ſtones; the hide ſeven ſtones.

* Taking the DIMENSIONS OF CATTLE, and deſcribing their POINTS with minuteneſs, is not merely a matter of curioſity. Nothing matures the judgement, more ſpeedily, nor gives a more adequate idea of the due proportion of the parts of a bullock. I never, however, underſtood that the admeaſurement of cattle was reduced, anywhere, to *common practice*, until lately. In the Weſt of Yorkſhire, I am told, the manufacturers, who kill their own beef, carry meaſuring tapes to market with them. The butcher, by conſtant practice, may be a match for the grazier, with his *eye* alone: but it is certainly prudent, in the clothier, to take his *meaſure* with him alſo.

A WEIGHING MACHINE would, however, in this caſe, be a much ſafer guide. One, fixed in a ſingle ſtall, opening with folding-doors to the ſtreet, would be a good appendage to any market-place.

The weight is not remarkably great; but, that a *ſmall* cow ſhould lay it on, in *ſeven months*, is extraordinary.

General Remarks on the present Scarcity of Cattle, in this Island.

The preſent *dearneſs*, ariſing beyond diſpute from a *real ſcarcity*, of cattle appears to be a matter of ſerious import to the community. Had it not been for the immenſe influx of Iriſh cattle, which have, during the laſt three or four years, poured into this Iſland, the grazing grounds could not have been fully ſtocked; nor the markets well ſupplied. There is not, generally ſpeaking, any *aged* cattle left, in *this* kingdom.

There can be only two reaſons of this ſcarcity: either the CONSUMPTION OF BEEF muſt have lately *increaſed*, or the REARING OF CATTLE muſt have *diminiſhed*; or the effect muſt have been produced, by the joint operation of the two cauſes.

I wiſh to bring the matter to a rational iſſue; and have endeavoured to collect evidences in the Diſtricts I have viſited. This Diſtrict affords two, which appear to be admiſſible.

Twenty

Twenty or thirty years ago, there was not, for the ſmaller markets of *this* Diſtrict, a ſingle cattle killed (except upon ſome extraordinary occaſion) during the winter, ſpring, or ſummer months. In autumn, particularly in the month of November, conſiderable numbers were butchered, to be ſalted and hung for winter proviſion; "hung-beef" being formerly, a ſtanding diſh, not only in this, but in other Diſtricts *. But the number which were then killed, in autumn, was ſmall, compared with the much greater numbers that are, at preſent, butchered in the Diſtrict; every market of which is, now, plentifully ſupplied with beef, the year round; and this, notwithſtanding conſiderable quantities are ſtill hung in autumn. The market of Malton might well vie with the London

* HANGING BEEF. Formerly, before the cultivation of turneps, &c. as winter food of cattle; and before the uſe of oil-cake, &c. was known; more eſpecially in *open* countries, at a diſtance from marſhes, fens, and rich *bay-land* Diſtricts; the practice here noticed was a thing of *neceſſity*. The only opportunity the huſbandman had of raiſing his cattle above the half-ſtarved common-paſture condition, was in the wane of ſummer, with the aft rgraſs of the common meadows, and the ſtubbles of th co nmon fields: theſe done, his ſources of *fatting* we e ex a ſted, without a poſſibility of renewal, until the wane of the en- ſuing ſummer.

markets. If only twice the quantity of beef be conſumed in the Diſtrict, now, which was, fifty years ago, the evidence is good.

Twenty or thirty years ago, great quantities of young ſtock, bred in the common paſtures, and in the rough grounds of the marſhes, and other central parts of the Vale, were annually ſent out of it. The number of lean oxen, too, which were ſent out of the country, was very conſiderable. Now, the Vale, perhaps, barely rears its own ſtock. A few young cattle may go out of it every year; but a number of Scotch and ſome Iriſh beace, and generally more or fewer young cattle from the Teeswater quarter, are annually brought into it. A few lean oxen, (few in compariſon with what formerly went out) with ſome barren cows, and a ſurplus of fat cattle, driven to the ports of Whitby and Scarborough, may be ſaid to be the only cattle which the Vale, at preſent, ſends to market.

The cauſes of this decline are the increaſe of horſes, the increaſe of tillage in the lower parts of the Vale, and the increaſe of the dairy upon its margins; an increaſe of grazing grounds in the richer parts, and, throughout, an increaſe in the conſumption of beef.

This,

This, too, may be fairly admitted, as a circumſtantial evidence at leaſt, of a growing ſcarcity of cattle, at preſent, in theſe kingdoms. I mean a ſcarcity comparatively with the preſent conſumption.

29.

THE DAIRY.

BUTTER being a principal object of the Vale huſbandry, a ſeparate ſection may with propriety be aſſigned, in this caſe, to the Management of the Dairy; — whoſe productions, in the Vale under ſurvey, are the following:

I. Calves, for the butcher, and for rearing.

II. Butter, for home conſumption and the London market.

III. Skim-cheeſe, for home conſumption.

IV. Hog liquor.

I. CALVES. The REARING of calves has been ſpoken of in the laſt ſection. The FATTING of calves belongs properly to this.

There

There is a practice, pretty common in this neighbourhood, though not general, which merits notice, from its ſingularity, rather than from its excellency. In this practice, the calf never ſucks its dam! which, from the time of her calving, is milked into a pail, and the warm milk immediately given to the calf; which, never having had the teat, ſoon learns to drink.

The chief reaſon given for this practice is, that the cow does not pine after her calf; ſo much, at leaſt, as when it is permitted to ſuck her.

For *rearing* calves, I can ſee no material objection to this method, except that of additional labor, which is ſtill more encreaſed when calves are *fatted* in that way; the time being longer in this caſe: and it ſeems to be allowed, that calves do not fat ſo kindly, with the pail, as when they ſuck the cow; nor is it, probably, ſo good for the udder of the cow.

II. BUTTER. Great quantities of butter are annually ſent out of the Vale. Many thouſand firkins are ſent, from Malton; and the produce of the weſt end of the Vale goes principally, to York.

The fraternity of cheeſemongers, in London, have agents, placed in different parts of the

the country, ſtiled "ſearchers," who probe and examine the quality of every firkin; and mark it *firſt*, *ſecond*, *third*, or "*greaſe*," according to its intrinſic quality.

The *firſts* and *ſeconds* go to the London market; the "*greaſe*" to the woollen manufactory in the weſt of Yorkſhire.

There are "weighers" likewiſe employed, to check the weight of each firkin, each of which has its maker's name branded upon it. Theſe are wiſe regulations: the ſearchers' mark is a guide for the London dealer, as the farmer's name is for the country "factor." If it will not bear the ſearch, the factor has a clue to the farmer; if, on its arrival in London, it do not anſwer the mark, it is returned upon the ſearcher.

After what has been ſaid, in the RURAL ECONOMY OF NORFOLK, on the ſubject of BUTTERMAKING, there is nothing, in the practice of this Diſtrict, entitled to minute deſcription. There are, nevertheleſs, a few particulars which may merit notice.

CLEANLINESS, the baſis of good management, is well attended to in moſt dairies; perhaps too cloſely in ſome. Formerly, the milk was ſet wholly in deep wooden bowls, almoſt

ſemi-

ſemi-globular: a worſe form could not be well deviſed. Now, it is ſet, principally, in leads — provincially, "lead-bowls" — made in the uſual broad flat ſhallow form; a form much better calculated for raiſing the cream*.

Theſe leads are *ſcalded*, as often as they are uſed, and, in common practice, are *ſcoured* about once a month. But this has been found, in the practice of one whoſe cleanlineſs cannot be doubted, to be injurious to the butter, churned next after the ſcouring of the leads. The effect is not immediately apparent; but the butter will not keep; preſently turning rancid. She therefore ſcours her leads, only once a year; about Mayday; and then with fine ſea-ſand; not with

* In ſome countries, MILK-LEADS are ſkimmed with a ſkimming-diſh: here, the milk is let off, through a hole in the center, leaving the cream in the lead. The pipe through which the milk eſcapes is fitted with a tall wooden ſtopper. Previous to drawing the ſtopper, a looſe wide leaden pipe, ſeven or eight inches long, is put over it. The baſe of this pipe is notched, or otherwiſe made uneven, ſo as to admit the milk to ſteal away beneath it, without endangering the eſcape of the cream; which (the pipe being removed) is afterwards let down through the ſame aperture.

with *ſalt*; the common material uſed in ſcouring lead bowls *.

The BARREL CHURN is now chiefly in uſe. An improvement has lately been made in its form. Formerly, the ſtaves were nearly ſtraight; now they are bent; the churn being made conſiderably bulging. By this means a churn, large enough to churn a firkin (56 lb.) at once, may be uſed to churn three or four pounds The entire quantity of the cream, though ſmall, being collected in the bulge, receives its due agitation. The "ſtanding churn," an aukward utenſil, ſeems to be going out of uſe. A barrel churn, two feet and a half long, two feet diameter at the mouth, and twentyone inches at the ends, with daſhers ſix inches wide, will churn either a firkin, or a few pounds, of butter. The price of ſuch a churn is about fifty ſhillings; iron hoops, cranks, frame, &c. incluſive.

The FIRKINS are made in the neighbourhood, at very low prices (price of a "whole "firkin,"

* I mention this circumſtance, as many "greaſe firkins" may be made through the means here noticed; and, if the evil effect be cauſed by a ſolution of the particles of lead, looſened by the ſcouring, the butter, if *eaten* in a recent ſtate, may be of ſtill worſe conſequence.

"firkin," weighing 12lb. is 10d. to 1s.—of a "half firkin," weighing 7lb. 8d. to 9d.). The ſtaves and heads of aſh; the hoops principally of hazle.

In PUTTING DOWN BUTTER, the firkin is ſcalded and ſalted on the inſide, previouſly to its being uſed: ſalt is ſtrewed at the bottom; the butter cloſely kneaded in; covered at the top with ſalt; and headed up for market.

The "firſt gathering" is generally SENT TO MARKET, in the ſpring, in a recent ſtate; the "ſummer butter" (namely, that gathered between the latter end of May and the beginning of November) is ſent, from time to time, as the factor's or the farmer's conveniency requires; or is ſometimes kept to the cloſe of the ſeaſon, and carried at once to market.

The PRICE of firkins, for the laſt ten years, has been 28s. to 32s.

III CHEESE. Skim cheeſe — provincially, "old-milk cheeſe"—is the natural accompaniment of a butter dairy. In the lower parts of the Vale, towards the banks of the Rye, ſome "new-milk cheeſes" are made; and of a quality nearly equal to thoſe of Glouceſter-

Glouceſterſhire. But on the marginal parts of it, this ſpecies of cheeſe is ſeldom attempted.

I have met with nothing ſtriking enough, in the manufacturing of ſkim cheeſe, to deſerve notice; excepting what relates to the CURD MILL; a utenſil of the dairy, which I never met with, elſewhere, and which is new to this Diſtrict.

IN MAKING SKIM CHEESE, the curd is broken up in the whey; the whey, when the curd has ſubſided, laded off; the remainder, with the curd, thrown into a coarſe ſtrainer; and having lain abroad in this (ſpread over a large tray, with a hole at the corner to let out the whey which drains through the cloth) until quite cool, the corners and looſe part of the ſtrainer are gathered together, in the hand, and the curd ſqueezed, as hard as the hands can preſs it. The curd in the ſtrainer is then put into a vat, and ſet in the preſs, for a few minutes, to diſcharge the remaining whey more effectually. The whey having done running, the curd is taken out of the preſs, and rebroken, as finely as poſſible; ſalted; and returned to the preſs.

It is in the final breaking the CURD MILL is uſed. The labor of doing it, by hand, when

when a large quantity of curd is to be broken, is almoſt intolerable. In a large dairy, a curd mill is found very valuable *.

The CONSUMPTION of ſkim cheeſe is, principally, in the neighbourhood of its manufacture. It is eaten by almoſt all ranks of people. If well made, it is not only palatable, but, I apprehend, a very wholeſome food. To have it in perfection, it ſhould be "kept one year under another:" that is, ſhould not be eaten under a year old.

The PRICE, on a par of the laſt ten years, has been 2s. to 2s. 6d. a ſtone (of 14lb.).

IV. HOG

* CURD MILL. This utenſil conſiſts of two rollers, working, in a thin deep cheſt, one above the other; on the principle of the common cider-mill of the Southern counties. The upper one is ſtuck with iron ſpikes, an inch long, and 1 ½ inch aſunder. The lower one is cloſely ſet with bevel-headed nails, riſing with a ſharp angle, or point, about a tenth of an inch out of the ſurface of the roller. The curd, partially broken, is put into a hopper, the bottom of which is the upper roller: this, working againſt the ſide of the box, prepares the curd for the bottom roller; which being finer, and working cloſer, grinds it down to ſmall granules. The rollers are about ſix inches diameter, and fifteen inches long. They are both of them turned by one crank; put on one end of the axle of the upper roller. On the oppoſite ends of the rollers are fixt two even-toothed wooden wheels; working in each other, and giving motion to the lower roller.

IV. HOG LIQUOR. The whey of ſkim milk is only a lean beverage for ſwine; but mixt with buttermilk, a tolerable food is formed. Pigs, however, are only *grown*, ſeldom *fatted*, with the "ſwillings" of the dairy.

The PRODUCE of a good Cow, in a common year, is thus calculated:

A rearing calf -	0	15	0
3 firkins of butter *, at 30s.	4	10	0
½ cwt. of ſkim cheeſe, at 18s.	0	9	0
Milk and whey for hogs	0	10	0
	£.6	4	0

30.

SWINE.

THE HUSBANDRY of ſwine has undergone a total change, in this part of the Diſtrict, within the laſt thirty or forty years.

Formerly, there was ſcarcely a BREEDING ſow in the Vale. The entire ſupply of ſtore

* A large dairy of cows, in which heifers are intermixt, ſeldom turn out three firkins each. Two and a half is, I believe, eſteemed a good produce; taking the dairy round.

pigs was from the Wolds, through the medium of Malton market. Now, they are bred wholly in the Vale.

The BREED, too, has been totally changed. The Wold pigs were of the white, gaunt, long-legged ſort, which appear to have been, formerly, the prevailing kind throughout the kingdom. Now, the black-ſandy Berkſhire breed is prevalent; with a mixture, here, as in other places, of the oriental race.

There is a variety of the laſt, the individuals of which have two very valuable properties. They are remarkably *cadiſh* and quiet; of a diſpoſition directly oppoſite to that wildneſs and ferocity, which I have experienced in other varieties of this race of animals, in different parts of the Iſland. Their other good quality is that of their *paſturing* freely; not only upon the better graſſes, but upon ſome of the more noxious weeds; particularly the *dock*. This is a property of ſwine, which is worth attending to, by the breeders of this ſpecies of liveſtock.

The GENERAL MANAGEMENT of ſwine, in the Vale, has likewiſe undergone a change. Formerly, the Wold pigs which were not fatted, for home conſumption, were returned

to

to Malton, fully grown and fleſhy, but not fat; and were there ſold, to drovers, who bought them up, probably, for the diſtillers, ſtarch-makers, &c. of the metropolis. Now, the ſurplus, which is much greater than formerly, are fatted, butchered, and ſold whole, to bacon makers; who ſalt and dry them, for the London and Weſt Yorkſhire markets.

31.

SHEEP.

Their general Economy.

THERE ARE FEW large flocks kept in the Vale. The farms are chiefly ſmall, and the commons are, now, moſtly incloſed. Almoſt every farmer, however, keeps a few; ſo that, on the whole, the number kept is conſiderable.

The general economy of ſheep is here very ſimple. Every man, let his number be great or ſmall, rears his own ſtock: his ſtore

flock (in the inclosed parts of the Vale) consisting of ewes,—hoggards,—and shearling wedders; his returns being in fat lambs,—two-shear wedders, (lean or fatted on turneps, hay, &c.) and aged ewes. In the richer parts of the Vale, shearling wedders are fatted.

But, in the MORELANDS, and upon the heights of the northern margin, where considerable flocks are kept, especially in the more central parts of the Morelands, a different economy prevails. The lambs are all reared, and the wedders generally kept, until they be three or four years old; mostly selling them and the aged ewes, lean, in autumn, to the Vale farmers: or, if the walk —provincially, the "heaf"—be good, they will sometimes get fat enough, upon the heaths, for the butcher.

The particulars to be noticed, in this place, are

I. Breed.
II. Rearing.
III. Treatment.
IV. Markets.

I. BREEDS. The old COMMON stock of the Vale was a thin-carcased, ill formed, white-faced, hornless breed. This (perhaps a weak dege-

degenerate variety) has of late years been ſo much improved, as no longer to bear marks of its former degeneracy. I ſpeak of the more highly improved flocks of the Vale. The old baſe blood may ſtill be detected, in the flocks of leſs attentive breeders.

The IMPROVEMENT has been effected, by the introduction of rams of the Leiceſterſhire, and the Teeswater breeds; the former purchaſed, or hired, of Mr. CULLY of Northumberland (a ſpirited and ſucceſsful diſciple of Mr. BAKEWELL of Leiceſterſhire); and the latter of Mr. COLLINS, and other attentive breeders, in the neighbourhood of Darlington, on the banks of the Tees.

Fortunately, perhaps, for the Vale, two of its moſt conſiderable farmers, to whom it is principally indebted, for its preſent improved breeds of ſtock, differ in their opinions reſpecting the ſuperior excellency of theſe two breeds of ſheep; each of them propagating, and encouraging, his own favorite breed.

Both of them are excellent, though perhaps widely different in their origin. Of the Leiceſterſhire breed I ſay nothing, in this place, as I may, hereafter, have occaſion to

ſpeak of it fully *. The Teeswater breed falls within the intention of the preſent work.

The "MUD" ſheep have been inhabitants of the banks of the Tees, time immemorial: I remember them, twenty years ago, of enormous ſize, reſembling, when their wool was in full growth, the ſmaller breeds of cattle, rather than ſheep. Their *fleſh*, nevertheleſs, was of an excellent quality; their *wool* (as long wool) fine, and of an uncommon length, ſingularly adapted to the worſted manufactory.

The preſent faſhionable breed is conſiderably ſmaller, than the original kind; but they are ſtill much larger and fuller of *bone*, than the Leiceſterſhire breed. They bear an analogy to the ſhorthorned breed of cattle, as thoſe of the Midland counties do to the longhorned. They are not ſo compact, nor ſo neat in their form, as the Leiceſterſhire ſheep; nevertheleſs, the excellency of their fleſh and fatting quality is not doubted; and their wool ſtill remains of a ſuperior ſtaple. For the banks of the Tees, or any other

* See the RURAL ECONOMY of the MIDLAND COUNTIES, firſt publiſhed in 1790.

other rich-land country, they may be ſingularly excellent *.

The MORELAND breed of ſheep has always been very different from that of the Vale, and has not varied, perhaps, during a ſucceſſion of centuries. It is peculiarly adapted to the extreme bleakneſs of the climature, and the extreme coarſeneſs of the herbage. They live upon the open heaths, the year round. Their food heath, ruſhes, and a few of the coarſeſt graſſes; a paſture on which, perhaps, every other breed of ſheep of *this* kingdom would ſtarve.

The Moreland ſheep reſemble, much, the Scotch ſheep, which are ſometimes brought into the Vale †: their horns wide; the face

 black

* In this Diſtrict, the Leiceſterſhire ſheep appear to gain a preference. One leading breeder lets out a conſiderable number of rams every year; and has already got the prices to ten or fifteen guineas, for the ſeaſon.

† 1796. I had conceived this variety of BLACK FACED SHEEP to be of Scotch extraction, before I had had an opportunity of examining the breeds of Scotland. But there are circumſtances which render it more than probable, that they travelled northward, from the mountains of Yorkſhire and Weſtmoreland, to thoſe of the South of Scotland: from whence they are now travelling in the ſame direction;—and have, within theſe few years, made their firſt entry into the Highlands; where they are ſupplanting the ſhort-tailed

black or mottled; in *countenance* and general appearance, very much reſembling the Norfolk breed; except that their wool is ſomewhat longer, and much coarſer, than that of the Norfolk ſheep. The covering of their buttocks is mere hair, reſembling the ſhag of the goat, rather than the wool of ſheep. But this is conſidered as a mark of hardineſs; and the Moordale ſhepherds prefer a coarſe-wooled ſhaggy tup *. The carcaſes of theſe ſheep are ſmall; not much larger than the heath ſheep of Norfolk: the ewes, moderately fatted, weighing from ſeven to ten pounds, the wedders ten to fourteen pounds, a quarter.

II. BREEDING. The common TIME OF PUTTING EWES TO THE RAM, in the Vale, is from old Michaelmas to the latter end of October;

tailed or Shetland breed; which have long been the eſtabliſhed inhabitants of the Northern mountains; as the long-tailed or Cheviot breed have been, in much probability, of the Southern; and ſtill remain in full poſſeſſion of part of the borders: where, it is poſſible, the introduction of the "black faced breed" might ſtill be traced. The ſubject, though no. important, is intereſting to what may be ſtiled AGRICULTURAL HISTORY.

* 1796. A circumſtance, which alone, perhaps, has debaſed their wool, and *varied* them from the Norfolk breed.

October; bringing them in, the latter end of March, or the beginning of April. In the Morelands, the latter end of November, or beginning of December, is choſen for the time of putting to, in order that the ſnows may be pretty well over, before the time of lambing.

If TWIN LAMBS be preferred, the ewes are put to ſuperior keep, a few weeks before the ram be admitted. This, likewiſe, brings them in nearer together, than when they are put to the ram, in low condition.

It is alſo underſtood, by attentive ſhepherds, that ewes ought to have an increaſe of keep, a few weeks *previous* to their lambing; but leſs judicious ſheep maſters think it ſufficient to put them to good keep, *as they drop their lambs.*

This, however, is a faulty practice. If there be any *myſtery* in the rearing of ſheep, it lies in giving the ewes a FLUSH OF MILK, *at* the time of lambing. This cannot be done without putting them to good keep, a fortnight or three weeks, *before* that time. An additional ſupply of milk cannot be *commanded* in a few hours. The carcaſe of the ewe, as well as her udder, may require to be

ſaturated,

ſaturated, at the time of lambing, leſt, *in the interim of preparation*, the lamb be ſtinted or ſtarved.

Another practice, to which attentive breeders pay due regard, is that of TRIMMING—provincially, "docking"—breeding ewes, as early in the ſpring as the ſtate of the weather will permit. I have ſeen the bags of ewes (of the modern breed) ſo heated with the dung and urine, which hung about them, as to become chafed to running ſores. The bag ought to be trimmed, a few weeks before lambing (when the ewes are put to freſh keep), and the tail and buttocks, as ſoon as warm weather ſet in.

GEN. OBS. ON BREEDING FLOCKS. To render the breeding of ſheep profitable, much attendance and attention is requiſite. A *few* ewes, therefore, cannot be worth the notice of any man, except a ſmall pains-taking farmer, who has little elſe to attend to. I have ſeen more labor and attention thrown away, upon a ſcore of ewes, than their whole produce was worth. A ewe flock, large enough to employ a ſhepherd, is, in many ſituations, the moſt profitable ſtock.

III. MANAGE-

III. MANAGEMENT OF STORE SHEEP. The only particular of management, which is here entitled to notice, is that of dreſſing them in autumn, with tar and greaſe — provincially, "SALVING;"— the tar and greaſe, with which they are anointed, being aptly enough termed *ſalve*.

How the practice was firſt introduced, into the Diſtrict under ſurvey, does not appear to be at preſent known, though not of more than fifty years ſtanding *.

The intention of this practice is to kill lice, prevent the ſcab, and make the wool grow; and another idea, I believe, is, that it fortifies the ſkin againſt the ſeverity of the winter's cold.

Whether it anſwer all or any of theſe intentions I will not aſſert. Whatever may be its effects, it has now been the invariable practice of the Diſtrict, for near half a century. I have not at leaſt met with more than one man who has deviated from it, through principle.

This

* 1796. This practice travels with the mountain breed of black faced ſheep! But what I have ſeen done, in Scotland, was executed in a manner much inferior to that of the Eaſtern Morelands of Yorkſhire.

This deviation, however, is made by one who ſeldom acts from caprice. He does not wholly deny its uſe, but thinks its effect is very tranſient. He has found tobacco water more effectual againſt vermin;—oil of tar, if cautiouſly uſed, a ſafe and certain remedy of the ſcab;—and is of opinion, that ſalving is of little if any uſe to the growth of the wool: he allows that it may encreaſe the *weight* of the wool, in proportion to the quantity of dirt it contracts, but thinks it does not add to the *quantity*.

Whether it does or does not may, nevertheleſs, be a moot point:—ointment rubbed, on a recent ſcar of a horſe, is believed to aſſiſt the hair in growing. Pomatum is allowed to encourage the growth of the human hair; and it is *probable* that ſalve may have *ſome* effect on the growth of wool: the only doubt with me is, whether the advantages, upon the whole, are adequate to the expence.

This is a matter difficult to be aſcertained: I can ſay, that the ſcab does not appear to be leſs prevalent, in this, than in other Diſtricts: and it appears probable, to me, that, notwithſtanding the preſent prevalency of the practice, it will in time wear away. I will, nevertheleſs,

vertheleſs, here give a detail of the proceſs; not to prolong its continuance, but to memorize a practice, which, at preſent, gives cold and dirty employment to thouſands, ſome weeks, in every year.

The *mixture* is eight pounds of *butter* (of the ſecond, third, or fourth quality—ſee article DAIRY) to one gallon of *tar*. The butter being diſſolved, the two ingredients are poured into a tub or other veſſel, and ſtirred, for ſome time, with a long wooden ſpatula; agitating them violently, and uniting them intimately together. The general guide is to keep ſtirring, until the butter has regained its ſtiffneſs, ſufficiently, to hold the ſtirring ſtick erect in the ointment; which, when quite cool, is of the conſiſtence of butter in warm weather. Some put the tar previouſly into the "ſalve-tub," and ſtir that, alone, until it loſes its blackneſs, acquiring a mellow yellowiſh hue; then add the diſſolved butter, and continue ſtirring until the ſtick ſtand on-end. If the butter be heated too much, it is thought to injure the tar: it ſhould be barely *oiled*.

The *time* of ſalving is from Michaelmas to Martinmas.

The

The *method* is this: the feet of the ſheep being bound, it is laid upon a bier—provincially, a "creel"—(about ſix feet long—two feet wide in the middle—twentyone inches toward the ends—with four legs about two feet long). The "ſalver" ſits aſtride of one end of the creel, the ſhoulder of the ſheep reſting againſt his thigh; its head under his arm. He begins the operation by parting, provincially, "ſhedding," the wool, from the withers to the tail, leaving a ſtraight open "ſhed" or cleft in the wool, the whole length of the ſheep. This cleft ought to be perfectly ſtraight, and clear at the bottom; a form which practice only can give it. It is made by taking the wool in the hands, and pulling it aſunder; giving ſtraightneſs to the cleft, with the thumbs. The fiſſure made, and the wool preſſed down flat on either ſide with the hands and wriſts, the workman takes a piece of ointment, the ſize of a large hazle-nut (from a kind of diſh formed out of a block of wood in the ſhape of a cheeſe), upon the *ſide* of the end of his fore finger, and applies it to the ſkin of the ſheep; driving it along the bottom of the ſhed, (ſome ſix or eight inches, till the whole be expended,) with

with a degree of ſleight which experience alone can teach: the perfection of the art lies in diſtributing the ointment, evenly, and in applying it entirely to the *ſkin* of the animal, without fouling the *wool*, except immediately at the root. One "finger-full" being expended, another and another is applied, until the whole length of the firſt ſhed be finiſhed: when a ſecond cleft is made, about an inch or an inch and a half from the firſt. In making the ſecond, and every ſucceeding ſhed, the fingers of one hand are kept in the laſt-made cleft, by which means an experienced workman is enabled to make the partings, parallel with each other. Towards the back of the ſheep, the ſheds are made cloſer to each other, than they are beneath its barrel; where the wool being thinner, the ſcab is leſs liable to make its attack.

Ten or twelve ſheep, of the middle ſize, are eſteemed the day's work of one man. His wages, and board, fifteen to eighteenpence, a day.

The expence is thus calculated: thirty ſheep take eight pounds of butter (ſeconds, thirds,

thirds, or greaſe), worth on a par		
fourpence halfpenny a pound	3	0
One gallon of tar -	1	0
Labor - - -	3	6
	7	6

Five ſhillings, a ſcore, or threepence, a ſheep.

IV. MARKETS. Weſt Yorkſhire is the principal market for WOOL. Formerly, a manufactory of coarſe woollen cloth was carried on, in the Eaſtern Morelands; but, at preſent, it is almoſt wholly laid aſide.

The following are the weights and values of the fleeces, of different breeds of ſheep, in the Diſtrict:

Moreland ſtore ewes, one and a half pound, at 4d—6d each!

——— aged wedders, fatted in the Vale, two and a half pounds, 4d—10d.

Ewes of the old Vale breed, ſummered on a common, four pounds, at 6d—2s.

Two ſheer wedders of the ſame breed, four and a half pounds, 2s. 6d.

Ewes of the improved breed, ſummered in incloſed grounds, ſeven pounds, at 5d—3s*.

Wool

* None of the ſheep, from which the above fleeces were taken, were ſalved.

Wool is here ſold by the *ſtone* of *ſeventeen* pounds.

The markets, for CARCASES, are the market towns in the neighbourhood, and the ports of Scarborough and Whitby.

The price of mutton, in the markets of the Vale, ten years ago, was twopence halfpenny to threepence a pound. This year (1787), fourpence to fourpence halfpenny a pound.

But the moſt ſubſtantial evidence, I have any where met with, of the recent riſe in the price of live ſtock, may be taken from the Moreland *ſtore* ſheep; a ſpecies of ſtock which has undergone no change whatever, either by breeding, or by cultivation.

The price of Moreland ſtore ewes, ten or fifteen years ago, was two ſhillings and ſixpence to five ſhillings, a head. This autumn, they were ſold for eight ſhillings and ſixpence. The price of Moreland ſtore wedders, the ſame diſtance of time ago, was ſix to eight ſhillings, a head. This autumn, they have been ſold for fourteen ſhillings!

32.

RABBITS.

THE VALE affords few rabbit warrens. The northern margin is the only part of it adapted to this ſpecies of liveſtock. At *Dalby*, there are two pretty large warrens. At *Lockton* there is one now "planting." And there are other parts of theſe heights which might be profitably ſtocked with rabbits. In general, however, property is too much intermixed to admit of an improvement, which is ſingularly adapted to the nature of theſe high grounds.

In ſituations where the *ground* *, as well as the ſoil, is ſuitable to rabbit warren, and where an extent of it, ſufficiently large, can be collected together in one property, there is a very ſtrong reaſon why it may be profitably ſtocked with rabbits.

The

* See NORFOLK: Art. RABBITS.

The hide of a bullock (of ſome breeds) is not worth more than one twentieth of his carcaſe. The ſkin of a ſheep may, in full wool, be worth from a ſixth to a tenth of its carcaſe. But the fur of a rabbit is worth twice the whole value of the carcaſe. Therefore, ſuppoſing the rabbit to conſume a quantity of food, in proportion to its carcaſe, it is, on the principle offered, a ſpecies of ſtock nearly three times as valuable as either cattle or ſheep.

This theory is ſtrongly corroborated, by an incident of practice. One of the warrens of this Diſtrict contains eighteen hundred acres of ſurface; moſt of it covered with a black Moreland ſoil; part of it a barren dead gravel; ſome little of it a thin limeſtone loam; not worth perhaps, on a par, *for the common purpoſes of huſbandry*, a ſhilling an acre; nevertheleſs, theſe eighteen hundred acres are let, *as a rabbit warren*, for three hundred pounds, a year!

I will not pretend to ſay, that the warren, here alluded to, is worth three hundred pounds a year, nor aſſert that it is not worth a ſhilling, an acre, to a huſbandman. If it be worth two hundred and fifty pounds, as a warren, and ſuppoſing it to be worth even

two ſhillings an acre, as a farm, it ſtill is a ſufficient evidence of the profitableneſs of rabbit warrens, in proper ſituations.

As I ſhall, in giving a ſketch of the huſbandry of the WOLDS, have occaſion to ſpeak fully of this ſpecies of ſtock, it is needleſs to dwell on the ſubject, here.

33.

POULTRY.

NOTHING ſufficiently ſtriking has occurred to me, in this Diſtrict, reſpecting the management or the breeds of poultry, to excite particular notice. The different ſpecies, and the management of them, are on a par with thoſe of the Iſland in general.

34.

BEES.

THIS may be called a Bee country;—eſpecially the Morelands, and the northern margin of the Vale; where great numbers of bees have been uſually kept, and great quantities of honey collected; chiefly from the flowers of the heath, which afford an abundant ſupply; but the produce is of an inferior quality; brown and ſtrongly flavored.

In hives, ſituated between the heaths and the cultivated country, a ſtriking contraſt is obſervable, between the ſpring and the autumnal combs. The former are gathered wholly from the meadows, paſture lands, trees, and cultivated crops; the latter, entirely from the flowers of the heath; none of the ſpecies of which begin to blow, until late in the ſummer. The combs of the

former will be nearly white as ſnow: and the honey limpid almoſt as the pureſt oil. Thoſe of the latter, brown, and the honey, they yield, of the color and conſiſtency of melted roſin. This difference is moſt ſtriking, when the hive is carried, in autumn, from the lower parts of the marginal heights, into the Moreland dales, to be filled up with honey; a practice which, ſingular as it may appear, has been followed with ſucceſs.

In the winter of 1782-3, a general mortality took place, among the bees of this country. Many bee keepers loſt their whole ſtock. I remember to have ſeen, in the ſpring of 1783, twelve or fifteen empty ſtones, in one garden, without a ſingle ſurviving hive.

But the univerſality of the deſtruction, uncommon as it was, being ſuch as no one can remember, was not ſo remarkable as the manner in which it was effected. The bees were obſerved to dwindle away, by degrees; though they had plenty of *honey* in their hives; at length vaniſhing; while ſtill, perhaps, a conſiderable quantity of *honey* remained unexhauſted!

A man who has paid ſome attention to bees, and whoſe ideas are frequently well-grounded,

grounded, was of opinion that the effect was entirely owing to the want of a ſucceſſion of young bees; under a ſuppoſition that the year preceding had not been a *breeding year*; and that the bees which dwindled away, in the ſpring, were the old bees dying of age.

There may be ſome truth in this opinion; the unuſually backward, and extremely wet, ſpring and ſummer of 1782, might check the breeding of young bees; but it is unlikely that it ſhould wholly put a ſtop to it; and that not one hive in ten ſhould have bred a ſingle bee. For, under this argument, the young ones, though few, would, with an ample ſtore of honey, have ſurvived.

In the courſe of the ſpring of 1783, an incident led me to a theory, which ſeems to explain the phenomenon, more fully.

Being attentive to a *female* ſallow which was in blow, I obſerved that bees were equally buſy among its flowers, as they were among the male catkins of a neighbouring tree.

This induced me to conſider the nature of the materials they collect, and to reflect on whether the different parts of generation, even in hermaphrodite flowers, may not

afford them distinct materials. HONEY, it is well understood, is collected from the *nectarium*. WAX may well be considered as a collection of the viscid mucus of the *pistillum*; as BEE-BREAD appears to be merely a collection of the farina of the *stamen*.

It is well understood, by bee keepers in general, and is asserted by Wildman himself, that bees cannot live without *bread*. That they cannot be kept alive with *pure honey alone*, is, I believe, well ascertained. But *honey* which has been pressed hard from a comb, containing *bee-bread as well as honey*, is considered as a safe and certain relief to them, when their own stores are exhausted.

Admitting that bees require bread, as well as honey, to support them in winter; and admitting that bee-bread is a collection of the stamineous farina of flowers; the phenomenon under notice is easily explainable.

It is well known, that flowers are tenacious of their parts of generation, in a rainy season; exposing them with caution. Nor is it mere exposure that fits the stamina for the purpose of the bee. The anthers must be burst by the sun, before the bee can load its

its thighs with the contained farina: which being expoſed, is liable to be waſhed away, or ſhook down, by the firſt heavy ſhower. Hence, the collection of BEE-BREAD, in a moiſt ſhowery ſeaſon, muſt be very precarious and inconſiderable.

But the collecting of WAX and HONEY depends leſs on the weather. For the flower once open, the bee has free acceſs to the nectary and piſtil, whoſe productions are leſs liable to a ſhower than is the farina. Beſides, it is, I believe, a fact which is not doubted, that bees collect honey from what are, perhaps, improperly called honey *dews*, as well as from flowers.

From theſe premiſſes, we may fairly, I think, draw the following concluſion.

The ſpring and ſummer of 1782 being extremely wet, (ſee NORFOLK) a dearth of BREAD took place. But, through intervals of dry weather, or through a plentifulneſs of *leaf* honey, the collection of HONEY was ſufficiently ample. While the bread laſted the bees lived. Nor did they, when it was conſumed, die at once, as when their entire ſtore is exhauſted. The honey prolonged their lives for a time; proportioned, perhaps,

perhaps, to their reſpective ages or conſtitutions; the individuals following each other, as diſeaſe and famine overcame them; until the whole periſhed: not through a want of HONEY; but for the want of a more ſubſtantial food; *their* STAFF OF LIFE.

THE

THE

WOLDS OF YORKSHIRE.

GENERAL VIEW

OF

THIS DISTRICT.

THE SITUATION and GENERAL APPEARANCE of the Yorkſhire Wolds have been given. Their OUTLINE is nearly a circle, whoſe diameter is about twentyfive miles. Their EXTENT, including their ſkirts, 500 ſquare miles, or more than 300,000 acres.

The SUBSTRUCTURE of theſe hills, is probably a uniform rock of HARD CHALK; riſing, in moſt places, to near the ſurface.

The immediate SUBSOIL is generally a CHALKY RUBBLE, of varied depth and contexture, intervening between the rock and the ſoil.

The

The prevailing SOIL is a CALCAREOUS LOAM; varying in depth and productiveneſs.

The Northeaſt quarter of the Wolds is covered with a thin infertile ſoil; applied to ſheepwalks; much of it being overrun with furze and heath; reſembling the inferior downs of Surrey.

On the contrary, a ſhallow valley, which extends ſome conſiderable diſtance, between Malton and Burlington, including the townſhips of Duggleby, Kirby, Lutton, Helperthorp, Weaverthorp, Foxholes, Woldnewton, &c. with a ſmall rivulet running through it (delightful ſummer ſituation!) enjoys a rich deep loamy ſoil; ſtrong enough for wheat, and chiefly under the plow.

On the higher Wolds, the ſoil is a lighter loam, from ſix or eight inches to a foot deep; moſt of it well adapted to the crops of turneps, barley, and ſainfoin; but has formerly lain, and ſtill lies in great quantity, in ſheepwalk and rabbit warren.

The CLIMATURE of theſe hills is cold: owing in ſome meaſure to their preſent nakedneſs. The north and eaſt winds, pouring in upon them, from the ſea, and, acroſs the Vale, from the Moreland Mountains, ſweep over their ſurface without a break.

The

The SEASONS, here, are ſomewhat earlier, than in the Morelands; but later, than in the Vale, or on the Howardian hills. The perfect dryneſs of the ſubſtratum of the Wolds is the only advantage they have, at preſent, in reſpect to climature.

INCLOSURE. Formerly, the Wolds, whether parcelled out in common field, or diſpoſed in more entire properties, lay entirely open; excepting a few ſmall yards, about the villages. The Eaſt-Wold Valley ſtill lies in a ſtate of common field. But, on the higher Wolds, ſome ſpirited attempts have lately been made at incloſure.

THE

THE

RURAL ECONOMY

OF

THIS DISTRICT.

IN giving A SKETCH OF THE RURAL ECONOMY OF THE WOLDS, the following particulars will be entitled to notice :

I. Eſtates.
II. Tenancy.
III. Rent.
IV. Removal.
V. Building.
VI. Planting.
VII. Farms.
VIII. Objects of Huſbandry.
IX. Succeſſion.
X. Manual Labor.
XI. Team Labor.
XII. Implements.
XIII. Manure.
XIV. Harveſting.
XV. Farmyard Management.
XVI. Markets.
XVII. Turneps.
XVIII. Sheep.
XIX. Rabbits.

I. ESTATES.

I. ESTATES. The lands of the Wolds belong chiefly to LARGE OWNERS; being moſtly occupied by tenants; few of them, I believe, being in the hands of yeomanry; as they are in the Vale, and a great part of the More-lands.

II. TENANCY. Upon the larger farms LEASES are become common. Some of *ſeven years*; which is conſidered as too ſhort a term: ſome *fourteen*, which good tenants ſeem to be fully ſatisfied with.

III. RENT. Upon the larger farms, fix to twelve ſhillings an acre. The rent depends, chiefly, on whether the tenant has, or has not, *liberty to break up old ſheep walk*, with which the larger farms moſtly abound. Theſe lands, in a ſtate of *ſward*, may not be worth more than five ſhillings an acre. But having lain, a ſucceſſion of ages, in a ſtate of graſs, they are many of them, for a courſe of years, worth five times that rent as *arable land*.

No wonder landed gentlemen are tenacious of theſe old graſs lands. They are treaſuries, whoſe keys they would be blameable in delivering up, without a ſuitable conſideration.

But

But they are ſtill more blameable in obſtinately depriving themſelves and the community of the uſe of them. The fineſt farm upon the Wolds is intolerably cramped, through an ill judged prohibition from breaking up the ſheepwalks, of which it principally conſiſts. The tenant cannot winter his ſheep upon the farm. He has not a ſufficiency of arable land, to grow turneps in proportion to his ſummer feed. It is not paying twenty pounds a week for ſheep feed, which conſtitutes the evil in this caſe; but the circumſtance of having his flocks ſcattered about the country, perhaps ten or fifteen miles from his farm, during the winter months.

A *general* permiſſion for breaking up can only be dictated by folly or neceſſity. A due *proportion* is all that is *at preſent* requiſite.

IV. REMOVALS. The TIME of changing tenants is Ladyday or Mayday. On large farms, moſtly Ladyday; the wheat on the ground being valued by referees. On ſmall farms, Mayday; the ſpring crops being likewiſe ſown by the outgoing tenant, and valued with the wheat, by referees.

V. BUILDINGS.

V. BUILDINGS. A number of new farmeries have, of late years, been erected upon the Wolds. The plan of *some* of them ſimple and eligible. The dwelling houſe, to the weſt; barns and ſtable, on the north; ſtack hovels, for cattle and implements, on the eaſt; forming a ſquare ſtraw yard, open to the ſouth; ſaving a high brick wall, with tall boarded gates; altogether well adapted to the bleakneſs of the ſituation. At the top of Garton hill, the dwelling houſe is ſimple and ſnug; becoming its uſe and ſituation; with low leantos; enlarging the roof, for the purpoſe of collecting rain water: a plan which ought to be univerſally adopted on theſe bleak and waterleſs hills *.

VI. PLANTING. Sir Chriſtopher Sykes may, I believe, claim the honor of being the firſt ſucceſsful planter upon the Wold Hills. Attempts had formerly been made; but without ſucceſs: owing, perhaps, more to the *ſmallneſs* and the *thinneſs* of the plantations, than to any other miſmanagement.

Sir Chriſtopher, I am well informed, is now contracting, or has contracted, with a

* For obſervations on the Wold PONDS, ſee the Art. DRINKING POOLS.

nurſeryman, for upwards of five hundred acres of planting; to be finiſhed in ten years: an undertaking which muſt do him infinite credit.

It is, perhaps, to be regretted, that Sir Chriſtopher's plantations conſiſt chiefly of the *pinus tribe*; moſtly of Scotch Fir; the moſt worthleſs of timber trees. As a ſkreen to better plants, it may, in bleak ſituations, have its uſe.

But the BEECH, to which the ſoil of the Wolds is peculiarly adapted, would be more acceptable to poſterity; and would afford much greater ornament to the Wold Hills. If raiſed from the maſt, with due care, there can be no doubt of its ſucceeding, on theſe Heights. The Welch mountains abound with it in their bleakeſt aſpects.

Other gentlemen are raiſing SKREEN PLANTATIONS, and LIVE HEDGES, in a moſt ſpirited manner.

In one inſtance, I obſerved three rows of hedgewood, planted about two feet apart, and defended by a row of poſts and rails, on either ſide: the bank, in which the poſts ſtand, appearing to have been formed of the ſubſtratum of chalk rubble; a ſlip of ſoil on either ſide being thrown in between the rails,

rails, to give encouragement to the hedge plants. In other inſtances, the ſoil has been cleanſed by a turnep fallow *. The plants, when I ſaw them, were vigorous, and in high keeping.

The incloſures, as yet, are moſtly large: forty or fifty acres. But ſhould the ſpirit of planting continue to diffuſe its influence over theſe hills, the ſize of incloſures will in time be leſſened. Should a time arrive when the higher ſwells ſhall be crowned with wood, and the intervening vallies be interſected with living fences; forming incloſures of eight or ten acres; the climature of the Wolds will be rendered ſome degrees of latitude more genial, than it is at preſent; and the productiveneſs of the ſoil be doubly that which it has hitherto been.

VII. FARMS. Many of them very large. *Mowthorp* and *Coldham* are near two thouſand acres each; *Crome* thirteen or fourteen hundred acres; all of them charming arable farms; ſuch as would (*if properly ſheltered*) let in Norfolk, for fourteen or fifteen ſhillings an acre.

* Gathering the cultivated ſoil into an evenly round, wide ridge, would, I apprehend, be found eligible.

VIII. OBJECTS OF HUSBANDRY. 1. STOCK;—principally, *ſheep* and *rabbits*. Few *cattle*, except what are purchaſed, in autumn, for the purpoſe of raiſing manure; being ſold off in the ſpring, chiefly to the graziers of Lincolnſhire. Some *horſes* are bred; but the more general practice is to buy in colts, at a year old, and to keep them until they be three or four; ſelling them, at that age, to country dealers: or otherwiſe to keep them till five years old, and make them up for the horſe ſhows. 2. CROPS. Principally *oats*; but much *barley* and ſome *peas* are grown; and, in the vallies, *wheat*. But, upon the high wolds, the largeſt farmers, until of late years, bought their bread corn. The old turf, when newly broken up, throws out immenſe crops of *oats*; and is, I believe, in general, equally productive of *rape*. Inſtances are mentioned, in which the firſt crop of rape has been equal to the purchaſe value of the land. *Turneps*, *clover*, and *ſainfoin*, are alſo Wold crops.

IX. SUCCESSION. No regular ſyſtem of management, with reſpect to the ſucceſſion of crops and fallow, is, in any part of the Wolds, to be found in general practice. Upon the thinner-ſoiled ſwells, the prevailing practice

practice is to break up, by ſodburning, for turneps; oats two years; barley and graſs ſeeds, letting the land lie down again to graſs. In the vallies, where wheat is grown, turneps, barley, clover, wheat, has of late years gained ſome footing.

X. MANUAL LABOR. The Wolds are thinly inhabited. The reſident laborers are few, compared with the work to be done; eſpecially in harveſt; when numbers flock to it, from the ſurrounding country. In leſs buſy ſeaſons, the work is done, moſtly, by yearly ſervants; the few laborers being, in winter at leaſt, chiefly employed in thraſhing: for which employment, the cottagers are ſometimes hired, by the winter half year. The wages for thraſhing, ſixpence to eightpence, a day, and board; or fourpence to fivepence, a quarter of oats, and board. The Wold farmers, generally ſpeaking, board all their workpeople.

XI. TEAM LABOR. The beaſts of labor are principally HORSES, of the ſaddle or the coach horſe breed. A few OXEN are ſometimes uſed about home.

The method of uſing draught horſes, upon the Wolds, is ſingular; whether they be applied to the waggon or the plow.

The Wold waggon is furniſhed with a pole, ſimilar to that of a coach; and the horſes are applied in a manner ſimilar to coach horſes. Four horſes are the uſual team; the driver, on ordinary occaſions, riding on the near-ſide wheel-horſe; generally trotting with the empty carriage.

At plow, the ſame four horſes, in the ſame harneſs, are, in ſtrong work, invariably uſed without a driver! the plowman guiding the four with reins: a practice which is, perhaps, peculiar to the Yorkſhire Wolds. In lighter work, as in ſtirring a fallow, two horſes only are uſed.

But, in this caſe, a practice equally ſingular is prevalent. A third horſe, drawing a light harrow, is faſtened on the off ſide of the plow horſes; the plowman driving the three.

This, in breaking up turnep grounds, or in other *ſpring* fallowing, is a good practice on dry land; which, by this means, is got perfectly fine, at a ſmall expence (the harrow in this caſe being uſually drawn by an old worn-out horſe, or by a two or three-year-old colt), and immediately as it is plowed, by which means the ſeed weeds have full time to ſpend themſelves. But, in *winter*, and

and in *ſummer*, the practice is pernicious. A fallow cannot lie too rough, in thoſe ſeaſons.

The HOURS OF WORK are long. In ſpring ſeed time, the plow teams will ſometimes ſtay out from ſix to ſix; the plowmen having their dinners carried to them, in the field; the horſes remaining all day without a bait, and with only a ſmall allowance of corn when they reach the ſtable! nevertheleſs, in light work, and in a buſy ſeaſon, each horſe plows near an acre a day. What breed of *black* horſes can ſtand hardſhips like theſe?

XII. IMPLEMENTS. The WAGGONS are high and aukward. The PLOW is of the old ſtraight-moldboard conſtruction. Both of them call loudly for improvement. The TURNWREST PLOW is much wanted upon the Wolds.

XIII. MANURE. YARD DUNG and SHEEP TEATHE are the principal manures. SOOT and ſome LIME are alſo in uſe. RAPE CAKE would, perhaps, be found a valuable manure upon the Wolds.

XIV. HARVESTING. All oats and barley, and much wheat, are mown, againſt the ſtanding corn; bound in ſheaf; and ſet up in ſtooks, at the time of mowing. The Wold farmers follow this practice, as being

leſs tedious than that of gaiting, as in the Vale (ſee Sect. HARVESTING), and leſs waſteful than that of harveſting looſe, in the South-of-England manner.

XV. FARMYARD MANAGEMENT. STRAW is all conſumed in open yards; chiefly in double racks, ſupported by four legs. No cattle are faſtened by the head; nor any ſtraw (except wheat ſtraw) bound.

The STRAWYARD STOCK are, chiefly, aged oxen, of the ſhorthorned breed, bought at Glanford-bridge and other fairs, in autumn; and ſold, in ſpring, to jobbers or graziers, who ſometimes buy them up in winter, on ſpeculation, to be delivered in ſpring. They leave about twenty ſhillings, a head, for wintering. But much depends upon judgement in buying them in.

XVI MARKETS. *Malton* and *Driffield*, both of them NAVIGATION TOWNS, and *Burlington*, a SEA PORT, are the principal markets for *corn*. The Derwent being made navigable, many years, before the navigation of the Hull was extended to Driffield, Malton was once the principal market. But, at preſent, Driffield, an improving place, takes the lead. At Malton, the corn trade is in the hands of a few *merchants*, who can generally

generally make their own price. At Driffield, the buyers are numerous, and moſtly *factors*, who purchaſe by commiſſion. By the low commiſſion of ſixpence a quarter, ſome of the factors are ſaid to make three or four hundred pounds a year; a ſtriking evidence this of the great quantity of corn which is grown upon theſe Wolds.

XVII. TURNEPS. The turnep crop may be ſaid to be ſtill a new thing to the Wolds; not more than of twenty years ſtanding, though ſingularly adapted to the ſoil; and notwithſtanding it has, in Norfolk, whoſe coaſt may almoſt be ſeen from theſe hills, been an eſtabliſhed object of culture, more than a century!

At preſent, this crop is in full eſtimation, being conſidered as the moſt ſolid baſis of the Wold huſbandry.

Turneps generally SUCCEED *ſward*, *ſod-burnt*, and *once plowed*, very fleet; or perhaps only rice-balked. No MANURE, and only ONCE HOED.

REMARK. This, at firſt ſight, may appear to be a looſe mode of culture; but not ſo if we duly conſider its baſis. If the turf be of a good age, and the ſoil of a tolerable quality, no other manure than its aſhes is required; and

and ſward which has been ſodburnt, and only once plowed, is much leſs liable to foul the crop with weeds, than land which has been under tillage. Upon the whole, it appears, to me, to be a practice well adapted to the Wolds, where old ſward is abundant, and where extraneous manures are difficult to be procured.

The APPLICATION of the turnep crop is almoſt wholly to ſheep, which are folded upon the *ſtanding turneps*; a practice that cannot be defended, and with only *one flock*; a practice which is ſtill more cenſurable. It is no wonder that the Wold ſheep, at turneps, ſhould be ſubject as they are to *diſorders*: today, ſatiated with the tops and the beſt of the pulp; tomorrow, pining over the ſhells, with only half their fill; and part of what they pick up, weeds and dirt. The next day, glutted with a flush of freſh turneps.

If turneps be eaten up *clean*, a *head flock* and *followers* are indiſpenſably neceſſary, to common good management. If it be requiſite to eat off turneps, with *one* flock of *fat* ſheep, one third of the crop at leaſt ought, in like management, to be left on the ground as manure *.

The

* See the Practice of NORFOLK, VOL. I. Sect. TURNEPS.

The FENCE of the SHEEP FOLD is generally of NETWORK, made of ſmall cord; the ſize of the meſhes four to ſix inches; the width or height of the fence about three feet; ſupported by ſtakes, eight or ten feet aſunder. The coſt, fourpence to fourpence halfpenny, a yard. But "net-hurdles" are more commonly *hired* (of rope makers) than purchaſed. The price is a ſhilling to eighteenpence, a week, for a hundred yards. About home, "bar-hurdles" are ſometimes uſed; but nets, being lighter carriage, are generally uſed at a diſtance. For ſheep which are hornleſs, as the Wold ſheep invariably are, netted folds are very eligible.

XVIII. SHEEP. The FLOCKS of the Wolds are ſome of them very large. One, at leaſt, ſo high as two thouſand; eight or nine hundred of them ewes; the reſt wedders and yearlings.

The BREED is a variety of the longwooled kind. Some of them very handſome, reſembling the preſent breed of Leiceſterſhire, but more active. The wedders will fat at two-ſhear (that is, two to three years old) to thirty pounds, a quarter. Produce about ſix pounds of wool: the length, ten to thirteen inches.

Some

Some years ago, a *croſs* of this breed, with the large breed of Lincolnſhire, was introduced upon the Wolds, to the great loſs of ſome of the Wold farmers. One of them calculates to have loſt ſeven hundred pounds, by a diſorder in the head, called the "megrims," which this ill judged croſs were ſubject to. He returned again to the Wold breed, and the diſorder left his flock.

REMARK. Every country appears to have a naturalized ſtock—of ſheep at leaſt. By neglect, this ſtock will degenerate. By care, it may be improved; either by the faireſt of its own individuals, or by thoſe of a *kindred variety*; not by *an alien breed*.

XIX. RABBITS. The Wold warrens are numerous, and ſome of them very extenſive. COLDHAM WARREN is at preſent, I believe, the largeſt upon theſe Wolds; and, probably, the moſt valuable warren, in the Iſland. The Coldham *farm* contains about nineteen hundred acres; and, ſpeaking generally, it is all *warren:* not, however, wholly appropriated to *rabbits*, a flock of ſix to eight hundred *ſheep* being kept within the warren walls; principally, however, on one ſide of the warren, away from the burrowing grounds.

This

This appears to be a practice peculiar to the Wolds *, where better soil is appropriated to rabbit warrens, than is perhaps in any other part of the Island. The Coldham warren, in point of *soil*, is most of it worth ten to twelve shillings an acre; some of it fifteen or sixteen shillings †. As these better parts become mossy, they are inclosed by a sod wall, the surface pared and burnt, and the soil broken up for arable crops. Having afforded a succession of crops of corn, turneps, &c. they are sown with grass seeds, and again thrown open to the rabbits and sheep.

In 1783, there were about two hundred acres of this farm under the plow, besides some little sheepwalk, which lay without the warren walls. The *warren* therefore, at that time, contained fifteen to sixteen hundred acres: and, adjoining to Coldham, are two more considerable warrens; so that there are, perhaps, three or four thousand acres of tolerably good land, lying together, and appropriated principally to rabbits.

To

* Of Yorkshire and Lincolnshire, whose hills likewise abound much with rabbit warren.

† But the present bleakness of the *situation* renders it of little more than half the value.

To give a general idea of the MANAGEMENT of the WOLD WARRENS, the following diviſion of the ſubject will be requiſite:

1. Soil.
2. Burrows.
3. Fences.
4. Species.
5. Taking.
6. Markets.

1. SOIL. There is a diſadvantage in ſtocking a *rich* ſoil with rabbits: a fluſh of graſs, after a dry ſeaſon, is found to produce a ſcouring; which ſometimes carries off great numbers.

2. BURROWING GROUND. Upon the high Wolds, the burrows are moſtly on the *ſides of hills:* at COLDHAM, principally in one deep valley; whoſe ſides are ſteep; giving the rabbits great freedom in working. The ſoil, in this caſe, about eight or ten inches deep; under this a chalky rubble, of ſome inches thick, lying on a chalkſtone rock. The burrows are in the ſubſoil, between the ſoil and the rock, and chiefly toward the tops of the hills *.

But at DRIFFIELDGREETS, near Driffield, where there are two large warrens, the ſurface is a *dead flat*; nevertheleſs, the warrens are well ſtocked and productive; a proof that

* Thouſands of daws build their neſts in theſe burrows, to the great annoyance of the rabbits.

that a flat ſurface may, in ſome caſes, be profitably ſtocked with rabbits. The ſoil, in this caſe, is a light ſand or gravelly loam.

In ſtocking a warren, whether the ſurface be flat or hilly, ARTIFICIAL BURROWS are made, to reconcile the rabbits to the ground, and to preſerve them from vermin, until they have time to make their own burrows. In making theſe burrows, an improvement has lately, I believe, been hit upon. They are bored with an AUGER of a diameter large enough to make a burrow of a ſufficient width. In a level warren, theſe AUGERS may, from time to time, be found uſeful.

3. WARREN FENCES. The common fence upon the Wolds is *ſod wall*, capped with furze, or of late with ſtiff ſtraw, forming a kind of thatch *. The warrens near Driffield are fenced with *paling*; an expenſive fence in the outſet, and always under repairs. A *brook*, though ever ſo deep, is found to be inſufficient as a fence againſt rabbits: one ſide of Driffieldgreets warren is bounded by a brook; but it is nevertheleſs fenced with paling. When the rabbits can evade this, they readily ſwim the brook.

4. SORT

* Reed would be found admirable in this intention.

4. SORT of RABBITS. Until of late years, the common *grey* rabbit—probably the native wild rabbit of the Iſland—was the only ſpecies. At preſent, the *ſilver-haired* rabbit is ſought after, and has, within the few laſt years, been introduced into moſt warrens *. The ſkin of the grey rabbit is *cut*; that is, the "wool" is pared off the pelt, as a material of *hats*: whereas that of the ſilver-haired rabbit is *dreſſed* as *fur*; which, I underſtand, goes principally to the Eaſt Indies. The color is a black ground, thickly interſperſed with ſingle white hairs. The ſkins of this variety ſell for about four ſhillings, a dozen, more than thoſe of the common ſort; a ſufficient inducement, this, for propagating it.

5. METHOD OF TAKING RABBITS. The Wold warreners have three ways of catching their rabbits:—with *fold nets*—with *ſpring nets*—and with "*tipes*;" a ſpecies of *trap*.

The *fold nets* are ſet about midnight, between the burrows and the feeding grounds; the rabbits being driven in, with dogs, and kept incloſed in the fold, until morning.

The *ſpring net*, when uſed, is, I believe, generally laid round a hay ſtack, or other place, where rabbits collect in numbers.

The

* Some of the Lincolnſhire warrens, it is ſaid, are already wholly ſtocked with this variety.

The *trap* is a more modern invention. It conſiſts of a large pit or ciſtern, formed within the ground, and covered with a floor; or with one large falling door, having a ſmall trapdoor toward its center, into which the rabbits are led by a narrow muce.

This trap, on its firſt introduction, was ſet moſtly by a hay ſtack; hay being, at that time, the chief winter food of rabbits; or on the outſide of the warren wall, where rabbits were obſerved to ſcratch much, in order to make their eſcape. Since the cultivation of turneps, as a winter food for this ſpecies of ſtock, has become a practice, the ſituation of the trap has been changed.

Turneps being cultivated in an incloſure within the warren, a trap is placed within the wall of this incloſure. For a night or two, the muce is left open, and the trap kept covered (with a board or triangular rail), in order to give the rabbits the requiſite haunt of the turneps; which having got, the trap is bared, and the required number taken.

In emptying the ciſtern, the rabbits are *ſorted:* thoſe which are fat, and in ſeaſon, are ſlaughtered; thoſe which are lean, or out of condition, are turned upon the turneps to improve.

At the close of the season, the bucks and the does are *sorted*, in a similar way: the bucks are slaughtered; the does turned loose to breed. ONE MALE, I understand, is considered as sufficient for SIX OR SEVEN FEMALES; and the nearer they can be brought to this proportion, the greater stock of young ones may be expected; it being the nature of the males (*unnatural* as it may seem) to destroy their young; more especially, perhaps, when their proportional number is too great.

Great precaution is requisite in the use of these traps. If too many rabbits be admitted, at once, and the cistern be kept close covered, only for a few hours, suffocation and inordinate heat take place, and the carcases, at least, are spoiled. Many thousand carcases have been wasted through this means—The traps are therefore watched; and, when the required number are caught, the muce is stopped, or the trap covered.

Some idea of the produce of the Wold warrens may be gathered, from the great numbers which are frequently slaughtered, at once. Five or six hundred couple have, not unfrequently, been slaughtered in one night: and, it is said, that, when the two

Driffield

Driffield warrens lay together, there was once an inſtance of fifteen hundred couple being killed at one ſlaughter.

6. MARKETS FOR RABBITS. York, Hull, and the neighbouring towns, for carcaſes: Glanford-bridge and Malton, for ſkins; which are cut by furriers, who reſide at thoſe places, and who find a market, for their wool, in the hat manufactories of London and Mancheſter.

Sometimes, the ſkins and carcaſes are ſold together, to huckſters, or other wholeſale dealers. The average price, for the ſeaſon, about two ſhillings a couple. The price of carcaſes, in the neighbourhood of the warrens, eightpence to tenpence a couple.

HOLDERNESS.

THIS is the only Diſtrict of the county I have not been in. I have repeatedly looked over its ſurface, and been upon its borders; but never entered its area. I purpoſed to have gone over it, this year (1787), but the Vale employed my whole attention, during ſummer; and the extreme wetneſs of the autumn would have prevented me from viſiting a low country, at that ſeaſon, had leiſure permitted it.

The objects of huſbandry, and the means of obtaining them, are, I have always underſtood, ſimilar to thoſe of the Vale of Pickering: nevertheleſs, Holderneſs may have its partial excellencies; as almoſt every Diſtrict has, in a greater or leſs degree.

The north-weſt quarter is appendant to a line of marginal villages; ſituated moſt deſirably on the ſkirts of the Wold hills; but no way excellent, I believe, in their plan of manage-

management. Nevertheleſs, the *coaſt* of Holderneſs may merit ſurvey.

1796. In March 1791 (in my way to London), I had the honor of paying a tranſient viſit to the late Mr. CONSTABLE of Burton Conſtable, an ancient family reſidence, ſituated near the center of this Diſtrict.

The ELEVATION and SURFACE of Holderneſs are extremely different, from what they appear to be, when ſeen from the more elevated ſummits of the Wold hills. Holderneſs is a true Vale or upper-ground Diſtrict, ſimilar to the Vales of Gloceſter, and to the richer Diſtricts of the Midland Counties. The ſurface is broken into ſwells and hollows, but never deſcends to low land; the area of the Diſtrict being free from marſhes and fens. Towards the mouth of the Humber, ſome conſiderable extent of marſh lands occur, and in entering Holderneſs, from Hull, a flat of rich marſhes, ſome two or three miles wide, are croſſed; and between Hull and Beverly, a conſiderable extent of fen lands lie a diſgrace to the county; but not particularly to Holderneſs; whoſe lands riſe out of the way of waters, and whoſe CLIMATE is healthy, as that of other Diſtricts of a ſimilar nature.

The SOILS are various and much intermixt, as frequently happens in *Vale* Diſtricts; in general, they are very productive.

And the MANAGEMENT, from what I ſaw of it, is above mediocrity.

CLEVELAND.

CLEVELAND is ſmall, comparatively with the other Diſtricts of Eaſt Yorkſhire. To the eaſt, it terminates in a broken country; mixing with the northern margin of the Moreland hills.

The OUTLINE, if the broken country about *Giſborough* be cut off, is nearly oval. The EXTENT of the greater diameter being about fourteen, of the ſhorter about ten miles; containing, within its area, ſomewhat more than one hundred ſquare miles; or about ſeventy thouſand acres.

The SURFACE is nearly plain, but perfectly free from collected water; a true Vale Diſtrict. Its principal brook is the Leven; running

running in a valley, ſome feet below the general ſurface.

The SOIL, almoſt invariably, a tenacious clay. Good wheat and bean land.

The OBJECTS OF HUSBANDRY are CORN, BUTTER, BACON, REARING CATTLE, and HORSES; varying but little, in its objects, from the VALE OF PICKERING; excepting that CLEVELAND partakes more of a CORN COUNTRY.

Some peculiarities of the Cleveland practice have been already mentioned. One which marks it ſtrongly, and which diſtinguiſhes it, from every other Diſtrict I have obſerved in, remains to be noticed.

The ROAD TEAM of Cleveland is, univerſally, the *three horſe cart*. Notwithſtanding the deepneſs of the roads, in a wet ſeaſon, there is ſcarcely a *waggon*, or a *long team*, in the country. The three horſes are, invariably, drawn, two-and-one; namely, one horſe in the ſhafts, the other two in a pair before it: the whole being guided by leathern reins, and driven with a long-thonged whip, in the coach manner.

This practice has probably ariſen, from the circumſtance of coals and lime being fetched,

into Cleveland, from diſtant parts of the county of Durham. The latter, which has long been the chief dependance of the Cleveland farmer, is drawn, into the interior parts of the Diſtrict, more than thirty miles; the teams going and returning without a reſt, excepting tranſient baits upon the road.

The rule, when going empty, is to trot two miles and feed one; the driver riding in the carriage the two miles, and walking by the ſide of his horſes the one; baiting them with hay, out of his hand, as they go along the road. When loaded, he keeps feeding, whenever he finds the horſes will eat a mouthful of hay. Corn is alſo carried in theſe journies; and given in bags, hung upon the horſes' heads, in the manner in which hackney coach horſes are fed, upon the ſtands in London. Horſes, thus uſed, will ſtand travelling, thirty miles every day. The breed is ſtrong, active, colored coach horſes.

The Cleveland team treads the road evenly; and is the ſtiffeſt; the moſt handy; and, for a *level country* and *long journies*, perhaps, the moſt eligible team, that invention is capable of ſuggeſting.

THE

THE

EASTERN MORELANDS

OF

YORKSHIRE.

THE SITUATION of this Diſtrict was given, in deſcribing the COUNTY at large. And, in giving a more minute deſcription of the Vale of Pickering, the Morelands are mentioned as bleak mountains, covered with heath, and interſected by CULTIVATED DALES. Theſe dales have been already noticed, as appendages of the Vale; ſo far as they are noticeable. What I propoſe, under the preſent head, is, to give ſome account of the MOUNTAINS, and their UNCULTIVATED VALLIES.

The CLIMATURE of the Morelands is extremely bleak; ſeveral degrees of latitude colder, than the Vale of Pickering; where rain, or perhaps open weather, will frequently prevail, while the Morelands are covered with ſnow.

The

The EXTENT of the Eaſtern Morelands, including the hills of HAMBLEDON, is thirty to forty miles of length, by ten to fifteen of breadth. Excluding the CULTIVATED DALES, &c. they may contain from three to four hundred ſquare miles, or from two to three hundred thouſand acres, of UNCULTIVATED HEATH.

The FOSSIL PRODUCTIONS of theſe mountains are principally FREE-STONE, (of a ſingularly fine grain) which too frequently riſes to the ſurface; lying, in ſome places, aboveground, in blocks; ſome of them of conſiderable ſize. A thin ſeam of COAL has been found, and ſtill continues to be ſparingly found, in different parts of theſe hills, at no great depth from the ſurface. IRON is forged near Ayton; and COPPER has been ſmelted near Hackneſs. But ALLUM SHALE is the moſt valuable material of the Eaſtern Morelands; which alone, I believe, furniſh the Iſland, and a great part of Europe, with allum.

The immediate SUBSOIL is generally SAND; which, *in ſome places*, is formed into a pan or cruſt; reſembling ruſty half-decayed iron, rather than an earthy ſubſtance: being almoſt as impervious, by water, as an iron veſſel.

The

The SOIL is invariably a BLACK MOOR;—apparently, a mixture of vegetable mold and ſand; reſembling the moory ſoil of fens.

Linneus, I think, calls this ſpecies of ſoil the *depauperated* ſoil of heaths; but on what grounds I know not. The moor of fens appears, obviouſly enough, to be compoſed of the decayed roots and other parts of vegetables; with a greater or leſs proportion of ſand and mud, waſhed in among them, while in a ſtate of growth. But how a ſimilar matter could be formed, on the tops of mountains, is leſs obvious. Nevertheleſs, MOUNTAIN MOOR has every appearance of a VEGETABLE MOLD.

This mold, which covers a principal part of the mountains of the Iſland, appears to me a moſt intereſting ſubject of inveſtigation.

It varies, greatly, in regard to depth. On the "low moors," where it has probably been repeatedly pared off for fuel, it barely covers the ſand or gravel of the ſubſoil: but, upon the higher more diſtant ſwells, the covering of ſoil is thicker; frequently, from one to two feet deep, of what is called "fat moor." In the vallies, particularly towards their heads, are peat bogs of ſeveral feet deep; buried in which, trees of great ſize have ſometimes been found.

The

The NATURAL PRODUCE of the more lofty ſwells of theſe mountains — termed, provincially, the "high moors"—is principally HEATH, interſperſed with patches of "BENT;" together with the common ruſh and other aquatics, in the vallies, and on the bogs with which even ſome of the ſwells abound.

But, at the feet of thoſe ſwells, and on the faces of the cliffs which terminate them to the ſouth, as well as upon the top of the marginal heights, which, when they ſhoot far to the northward, as between Newton and Cawthorn, are covered with black ſoil and heath, —a number of the better graſſes, with a variety of other plants, may be found growing among the heath; notwithſtanding the ſituation; which, in point of bleakneſs, is little inferior to the "Moorheads."

A liſt of theſe hardy plants may have its uſe.

Provincial.	*Linnean.*	*Engliſh.*
Common ling,	—*erica vulgaris*,	—common heath.
Crow ling,	—*erica cinerea*,	—fineleaved heath.
Wire ling,	—*erica tetralix*,	—croſsleaved heath.
Bent,	—*juncus ſquarroſus*,	—heath ruſh.
Seaves,	—*juncus effuſus*,	—ſoft ruſh.

Moor

Provincial.	*Linnean.*	*Engliſh.*

Moor palms,—*eriophorum*,—cotton ruſh.

Gale,—*myrica gale*,—ſweet gale.

Juniper,—*juniperus communis*,—common juniper.

Cranberry,—*vaccinium oxycoccos*,—cranberry.

Bleaberry,—*vaccinium myrtillus*,—common whortleberry.

White clover,—*trifolium repens*,—creeping trefoil.

Cheeſe-cake graſs,—*lotus corniculatus*,—birds-foot trefoil.

Bent graſs,—*nardus ſtricta*,—mat graſs.

aira flexuoſa,—heath airgraſs.

melica cærulea,—purple melicgraſs.

aira præcox ?—early airgraſs * ?

anthoxanthum odoratum,—vernal.

briza media,—trembling graſs.

cynoſurus criſtatus,—creſted dogstail.

feſtuca duriuſcula,—hard feſcue.

feſtuca bromoides ?—barren feſcue ?

lolium perenne,—raygraſs.

dactylis glomerata,—orchardgraſs.

holcus mollis,—couchy ſoftgraſs.

euphraſia officinalis,—common eyebright.

orobus

* It was late in ſummer, before I made this collection. Some of the early plants had ſeeded, and their ſpecific characters were of courſe become doubtful.

Linnean.	*English.*
orobus tuberosus,	—bulbous pea.
galium verum,	—yellow bedstraw.
galium montanum,	—mountain bedstraw.
scabiosa succisa,	—meadow scabious.
rumex acetosella,	—sheep's sorrel.
prunella vulgaris,	—selfheal.
tormentilla erecta,	—common tormentil.
potentilla reptans,	—common cinquefoil.
cistus helianthemum,	—dwarf cistus.
thymus serpyllum,	—wild thyme.
poterium sanguisorba,	—upland burnet.
spiræa filipendula,	—dropwort.
achillea millefolium,	—milfoil.
hypericum perforatum,	—common Saint-johnswort.
carlina vulgaris,	—carline thistle.
carduus palustris *,	—marsh thistle.
pteris aquilina,	—brakes.

THE

* This thistle has no other specific difference, which I have been able to discover, from *carduus palustris*, than the thickness of its stem; which, upon these dry barren bleak hills, will sometimes be equal in size to the largest walking cane. There is a variety of it with white flowers.

THE

RURAL ECONOMY

OF

THIS DISTRICT.

THE STOCK of the Morelands is principally *ſheep*. Upon the "high-moors" they are the only ſtock. On the lower borders, and on the margins of the cultivated dales, young *cattle* are kept upon them, a conſiderable part of ſummer. But, in a general light, SHEEP may be taken as the ſtock of the Morelands; and though they be thinly ſtocked, the number on the whole is conſiderable.

In ſtocking theſe mountains with ſheep, the general calculation is, I believe, one ſheep to ten acres. The number therefore kept, on the foregoing calculation, is twenty to thirty thouſand.

Theſe ſheep live entirely upon the "moor," from their being a year old, until the time of their being ſold off; which, formerly, was not until they were four or five years old

The

The yearly profit of a Moreland ſheep (very ſmall, ſee Art. SHEEP), allowing for attendance, hazard *, ſalving, and a little hay in winter, when the heath is buried in ſnow, may be laid at two ſhillings and ſixpence, a head †.

Conſequently, the YEARLY PRODUCE OF THE HERBAGE, at preſent, is THREEPENCE AN ACRE; at which rate much of it was valued, by the Commiſſioners, under the Pickering Bill of Incloſure ‡.

The

* A Moreland farmer reckons that, if half the number he breeds reach a market, he has tolerable luck.

† This calculation is made on the advanced price which ſheep have borne, on a par of the laſt ten years. There are who aſſert, that, if attendance were rigidly calculated, no neat profit whatever would ariſe, from keeping ſheep on theſe heaths. But the number of *little fortunes* which have been made in the Moreland dales, principally, it is believed, by keeping ſheep, contradict this aſſertion.

‡ Beſides the *herbage*, the *fuel* which is pared off the ſurface and cut out of the bogs, may be conſidered, at preſent, as a ſpecies of PRODUCE.

The Pickering highmoor allotments, containing twenty acres or upward, are now ſelling, for ten pounds each. The fee ſimple of three of theſe allotments, containing near one hundred acres, was purchaſed, the other day, for thirty pounds.

The IMPROVEMENTS which have been attempted, among theſe hills, require now to be mentioned.

The late SIR CHARLES TURNER ranks higheſt as an improver of the Morelands. But Sir Charles's ſite of improvement is not a fair ſpecimen, of the two hundred thouſand acres of uncultivated heath, which are the immediate ſubject of diſcuſſion.

KELDALE *, the principal ſite, is a valley iſſuing out of Cleveland. The bottom, which has formerly been incloſed, is a rich loam, of great depth; but had been rendered unproductive, for want of draining. The ſides of the valley are variouſly ſoiled; moſtly bog, or a fat moory ſoil, formed probably by ſprings, with which the whole valley abounds, and which, having trickled down its ſides from age to age, have clad them in vegetable mold. Keldale, at the time Sir Charles undertook its improvement, was a *neglected valley*, whoſe *ſoils* were full of *intrinſic riches*, and required nothing, but an improvement of their *ſubſoil*, to render them highly productive.

Had the improvements of this valley been ſet about, with deliberation, and carried on

* The Valley of Springs.

with judgement and firmneſs, the profits ariſing from it would have been exceedingly great. Even in the irregular way in which they were conducted, the improvement muſt have greatly exceeded the expence. In the ſpring of 1783, when I ſaw them, Sir Charles had let off one farm of one hundred and fifty pounds a year (containing about one hundred and fifty acres!) and had then built, or was building, three or four more ſubſtantial farm-houſes.

KEMPSWIDDEN, the other ſite of Sir Charles's improvements, is more nearly allied to our preſent ſubject. This is a high ridge of mountain, which forms one ſide of the valley of Keldale. The ſoil is partly black moor; in part, of a brown loamy nature; altogether, much ſuperior in natural quality to the "high moors;" and equal, if not ſuperior, to any extenſive plot of uncultivated heath, on *this* ſide of the Morelands.

In 1783, the principal part of this hill had been incloſed with ſtone walls; and part of it had, in the outſet, been unfortunately broken up for *corn*. But the rich loams of Keldale being found to be better adapted to arable crops, this was prudently laid down to *graſs*; a ſpecies of crop much better ſuited,

ſuited, than corn, to ſuch a ſoil, in ſuch a ſituation.

The incloſing of Kempſwidden was evidently premature. Had Sir Charles begun at the bottom of Keldale; climbing by degrees up its ſides; reaching, in due proceſs of time, the tops of the hills; what amuſement and profit might have been reaped from the undertaking!

The ATTEMPTS which have been made, on this ſide of theſe mountains, remain to be noticed.

About twenty years ago, the incloſure of MIDDLETON, whoſe pariſh extends into the Morelands, gave freedom to the ſpirit of improvement.

The *ſite* which was principally choſen, for the eſſays that have been made, were the lower ſkirts of the Moreland hills, under the northern ſteep of the limeſtone heights. This ſituation was in a degree of ſhelter, was near the cultivated country, and the ſoil, in that valley, is better than it is higher up the ſides of the hills.

The *principle of improvement* was to extend the cultivated country into the Morelands. *Corn* was of courſe the main object. The *heathy waſtes* were conſidered as *graſs com-*

mons; which uſually are, and generally ought to be, converted into *arable land*, and kept in that ſtate, for a courſe of years, after their incloſure.

The *method of breaking-up* was either by paring and burning, or by fallowing; which latter was performed in a ſingular manner. The heath being previouſly ſinged off, the land was plowed, and ſuffered to lie unſtirred in rough furrow, for *two years*, in order to give the roots of the heath time to rot. The *third year*, it was ſtirred as a *fallow*; and the *fourth year*, cropped.

The *manure*, uſed, was invariably lime; which is burnt, in quantity, near the ſite of improvement. The quantity ſet on, three to ſix or ſeven chaldrons, an acre.

The *crops* wheat, rye, oats, potatoes, turneps. Red clover does not flouriſh: it will riſe very well from the ſeed, but generally goes off, the firſt winter. And raygraſs has been cautiouſly uſed, leſt it ſhould foul or impoveriſh the land!

The *reſult* of theſe experiments, ſome of them on a pretty large ſcale, is, ſome ſmall fortunes have been ſunk, and ſome larger ones have been injured. I have not come at

any

any thing like proof, of even one inſtance, in which the *improvement* has been adequate to the *expence*.

Hints for the Improvement of the Eastern Morelands of Yorkshire.

From theſe premiſes, we may ſafely infer, that the two hundred thouſand acres of land, under notice, are unimproveable; or that the attempts at improvement, which have hitherto been made, have been ill conducted; or that the principle of improvement has hitherto been erroneous.

Unprepared as I am with ſelf-practice, in the cultivation of theſe waſtes, it would be raſhneſs in me to dictate a general plan of improvement; but having ſome general knowledge of improvements of this nature, and having beſtowed ſome conſiderable ſhare of obſervation and attention, on the Diſtrict under conſideration, it might be wrong to ſuppreſs the reflections which have occurred to me, reſpecting its improvement. In a kingdom whoſe limits are not extenſive, two hundred thouſand acres of ſurface becomes an object of national importance; and on whether they lie in a ſtate of waſte, or in a

ſtate of productiveneſs, the welfare and happineſs of many individuals may depend.

The PRINCIPLE OF IMPROVEMENT is what I ſhall more particularly ſpeak to; and in doing this, I ſhall keep the HIGH MOORS—not the heathy upper margin of the limeſtone heights—principally in view.

It appears, to me, that to attempt, *at preſent*, to crop theſe heaths with CORN, is injudicious in the extreme. To begin with *carrying off* the means of productiveneſs, in the ſhape of *grain*, (which the cultivation of corn implies) from a ſoil which, it is to be feared, naturally contains them in very inconſiderable quantity, is irreconcileable with common prudence.

The PRODUCTIONS which ſtrike me, as eligible to be PROPAGATED, at preſent, on theſe heaths, are *wood* and *herbage*.

I. PLANTATIONS. There are evidences, but no proof, of theſe hills having been formerly covered with wood. The trees which are ſtill found in the peat bogs are a pretty ſtrong evidence. And part of theſe hills being included within the ancient *foreſt* of Pickering, is a corroborating circumſtance.

That

That trees, if properly choſen and properly managed, would grow on theſe hills, is, I believe, beyond diſpute. And I am clearly of opinion that, *if they be improveable*, planting is the firſt ſtep, which ought to be taken, toward their improvement. Woodlands, if once extended, would not only afford immediate ſhelter to ſtock; but would, in all human probability, change the climature of theſe bleak ſwells, ſo far as to give due encouragement to the herbage that might be cultivated upon them.

Where the ſurface is ſtrowed with large ſtones, planting ſeems to be the only probable mean of improvement. Where the ſurface is free, ſkreens of wood are principally wanted.

The SCOTCH FIR and the BIRCH might be employed to break off the North and the Eaſterly winds. The NORWAY SPRUCE and the LARCH, and, in all probability, the OAK, might, with due care, be reared in the more genial aſpects *.

Much would depend upon MANAGEMENT. —In Keldale, and on Kempſwidden, the pine-

* 1796. The LARCH ought to prevail, in the bleaker more expoſed ſituations. The Highlands of Scotland afford ample teſtimony of its excellency, in ſuch ſituations.

tribe and oaklings were dibbled in, among the ſtanding heath. No wonder they miſcarried. To enſure ſucceſs, the ground ſhould be trenched with the ſpade; or be prepared with the plow; and the plants be put in with the nurſeryman's beſt care. Not ſingly, or widely ſcattered; but in numbers, and in cloſe order *.

There is a natural warmth in vegetable as in animal life. One tree is raiſed with difficulty, in any ſituation which is inclined to bleakneſs; but plant a number, in cloſe order, and the difficulty is overcome. They not only create among themſelves, by their natural warmth and perſpiration, a freſh atmoſphere; but aſſiſt each other, in withſtanding the attacks of the winds, and other enemies.

II. CULTIVATED HERBAGE. *If theſe hills be improveable by huſbandry*, the principle of improvement appears, to me, to be that of removing the *heath* (wholly or in great part), and replacing it with *herbage*, adapted to ſuch *ſtock*, as is beſt ſuited to the ſoil and ſituation.

Sheep

* For the method of Planting, on the HIGHLANDS OF SCOTLAND, ſee PLANTING and RURAL ORNAMENT, Section GROVES.

Sheep and *rabbits* are the ſtock beſt adapted to theſe hills; and the ſhorteſt and leaſt expenſive way of bringing them into a ſtate of SHEEP WALK and RABBIT WARREN is, on this principle of improvement, the *firſt* thing required.

The Heath, it is more than probable, cannot be overcome without *cultivation*. A ſimilar degree of *tillage* would probably be requiſite for herbage as for corn *.

The SPECIES OF HERBAGE would be the *graſſes*, the *legumes*, and the *braſſica tribe*. The hardieſt of the two former may be ſeen in the foregoing liſt. The *turnep* and the *rape* might be choſen from the laſt. The *rye* and the *oat*, if fed off, or mown for hay, while in a ſtate of *herbage*, might be found eligible.

The

* In Derbyſhire, it has been found that a thick covering of *lime*, alone, is equal to the deſtruction of the heath, *(without breaking up the ſoil,)* and to the production of a turf of rich herbage. But I have heard it doubted, by thoſe who are acquainted with the practice, whether in that caſe the improvement be adequate to the expence; the quantity of lime requiſite to produce the effect being great. However, on the ſkirts of the hills under notice, to which lime might be carried at a moderate expence, the experiment would certainly be worth making.

1796. Repeatedly burning off the heath, and paſturing hard with ſheep, would tend much to its deſtruction.

The MANURES which preſent themſelves are *lime*, which might be had in any quantity, and within a ſhort diſtance, compared with that which it is carried, in other Diſtricts. *Aſhes* of the peat bogs, and the fat moor, where this is of ſufficient depth, might likewiſe be had at will. Even the "*fat moor*," unburnt, it is more than probable, would afford a ſalutary manure, if properly applied. I have obſerved inſtances, in which having been thrown upon the ſurface, (as in cutting through it for a road) it has, in a ſhort time, become overgrown with a turf of fine herbage. *Earths*, if properly ſought for, might, it is highly probable, be found, with natural qualities adapted to the improvement of the moory ſoil.

Another ſpecies of improvement, which it is probable might be proſecuted with ſucceſs, is that of cutting off the ſprings which overflow the ſides or the bottom of hills, and UNDERDRAINING, if requiſite, the bogs they have formed; by which means many fertile patches might, it is probable, be produced.

Another ſpecies of melioration, applicable to the reclaiming of theſe waſtes, is WATERING—flooding. I have obſerved where the

water,

waters of hollow ways, &c. break out, over the black earth, a covering of graſs takes place. Almoſt all the bottoms of the vallies, and ſkirts of the hills, might be flooded, with the ſprings and rivulets, which lie above them.

Thoſe who are unacquainted with the practice of flooding, will doubt the efficacy of the waters of *ſprings* and *clear* rivulets; while thoſe who are verſed in it, would ſmile at their want of information. I have ſeen waters perfectly limpid produce the happieſt effect. It is not the *color*, but the *intrinſic quality*, of water which fits it for the purpoſe of melioration. Any water, which is not in its nature poiſonous to plants, has, if properly thrown over graſs land, a beneficial effect. Whether the ſprings and rivulets, in queſtion, would, or would not, have a beneficial effect, on the lands which lie below them, might eaſily be put to the teſt.

By application and due attention, upon the ſpot, other probable means of improvement might preſent themſelves.

That the principal part of theſe hills might be brought into a ſtate of graſs, of no mean productiveneſs, appears to me, highly

highly probable *. But whether any means of improving can be hit upon, which would render the improvement greater than the expence of obtaining it, experience alone can ſhew; and *individuals* ought to enter cautiouſly into the project.

But, viewed in a *national* light, an improvement of this kind, whether individuals gain or loſe by the proſecution of it, is deſirable. If, through the means of a ſoil which lies waſte, of foſſile ſubſtances which lie uſeleſs, of fire which may be had at will, and of water

* An inſtance ſtrongly corroborative of this opinion may be produced. A laborer who lived in "Blakay-Houſe,"—ſituated near the higheſt ſwell of theſe mountains,—incloſed a patch of moor adjoining to his houſe: a fair ſpecimen of "turf moor;"—namely, a dry black ſtoney ſoil, lying on a ſandy ſubſoil. Nevertheleſs, in 1783, when this improvement accidentally caught my eye, he had converted the principal part of it, namely about two acres, into a piece of *very productive graſs land.* He told me that he had tried *corn* of all ſorts upon it without ſucceſs. It came up very well, but generally died away in weaning from the kernel. Nor did *potatoes* ever do well. He had one year a very fine proſpect; but a cold high wind cut them off entirely. He was ſo fully tired of every thing but *graſs*, that upon a ſtripe he was about to lay down, he only meant to throw a few oats, by way of encreaſing the ſwath of hay, intending to mow them off with the reſt of his cloſe. His *manure*—lime, aſhes, and cow dung; doing a patch well over every year.

water which nature has provided upon the ſpot, lands that are infertile can be rendered productive, without robbing thoſe which are already in a ſtate of productiveneſs,—the reality of the acquiſition, *to the public*, cannot be doubted.

In the center of theſe hills, among their higheſt eminences, lies a plot of land which belongs, excluſively, to the Duchy of Lancaſter. Might it not be laudable, in GOVERNMENT, to direct ſome attention toward its improvement? The two hundred thouſand acres of waſte, which lie immediately round it, would not be the only object in view: Twenty times the quantity of ſimilar ſurface lies waſte within the kingdom.

LIST

OF

RATES, &c.

BUILDING MATERIALS.

OAK TIMBER, for buildings, 14*d.* to 18*d.* a foot.

Aſh timber, 1*s.* to 1*s.* 6*d.* a foot.

"Stock" bricks, 21*s.* a thouſand, and

"Water" bricks, 15*s.*

Pantiles, 45*s.*

Ridge-ſtones, 5*d.* a foot.

Copings of gables, 5*d.*

Gable brackets, 2*s.* 6*d.* each.

Lime, 7*s.* to 9*s.* a chaldron.

Dimenſions of bricks, $9\frac{1}{4}$—$4\frac{1}{4}$—$2\frac{1}{2}$ inches.

———————— pantiles, 14 by 10 inches.

CAR-

CARPENTER's WORK.

Journeyman's wages, 14*d.* and board, or 2*s.* a day.

MASON's WORK.

Journeyman's wages, 16*d.* and board, or 2*s.* a day.

Laborers——————— 10*d.* ——————— or 1*s.* 6*d.* a day.

BLACKSMITH's WORK.

Common heavy work, 4*d.* a lb.
Traces, draught-irons, &c. 6*d.* a lb.
Horſe-ſhoes, 4*d.* each—removes, 1*d.* each.
Laying a ſhare or coulter, 8*d.* to 1*s.*
Sharping —— ——1*d.*

WOODLANDS.

Ship-timber, at the ports, 3*l.* to 3 guineas, a ton.

Carriage of timber, about 9*d.* a ton, a mile.

"Crambles"

"Crambles"—firewood boughs, 10*s.* to 12*s.* a load.

Bark, ready chopt for the tanner, 10*s.* 6*d.* a quarter.

Peeling bark, about 20*d.* a day.

——— and chopping 3*s.* to 3*s.* 6*d.* a quarter.

Spray faggots, 6*s.* to 8*s.* a hundred of ſix ſcores.

Binding ſuch faggots, 2*s.*

Felling and binding furze faggots, 4*d.* a ſcore.

Grubbing ——————————— 6*d.* a ſcore.

Grubbing without binding, 20*s.* to 30*s.* an acre.

PLANTATIONS.

Price of oziers, 1*s.* a bundle of a foot diameter, or 1 ¼ yard in circumference.

FENCES.

Price of ſeedling white thorn, 5*s.* a thouſand.

——— tranſplanted ——— 7*s.* to 8*s.* ———

Setting poſts and two rails, and winding them with thorns, 4*d.* to 5*d.* a rod of 7 yards.

Stake-and-edder hedge, 3*d.* to 4*d.* a rod of 7 yards.

Fence walls; raiſing ſtones, carriage, and walling, 1*s.* a rod of 7 yards.

TEAM LABOR.

Hire of four horſes and a man, 8*s.* to 10*s.* a day.

Carriage of coals, about 8*d.* a chaldron, a mile.

YEARLY SERVANT's WAGES.

Head man, 13 to 15*l.*
Second —— 8 to 10*l.*
Dairymaid, 5 to 6*l.*

DAY-LABORER's WAGES.

Man in winter, 8*d.* a day and board.
—— in ſummer, 1*s.* to 18*d.* — ———
Woman, in autumn and ſpring, 6*d.* a day, no board.
——— in hay-time, 9*d.*—— ———
——— in harveſt, 10*d.*—— ———

MA-

MANURE.

Price of lime, 7*s.* to 9*s.* a chaldron.

Burning lime — raiſing ſtones, breaking, filling, and helping to draw, 18*d.* to 20*d.* a chaldron.

Draw, on the north-ſide of the Vale (materials hard), from 2 ½ to 3 chaldrons of lime, from one of coals.

—— on the ſouth-ſide (ſtone ſofter), 3 to 3 ½ from one.

Set on 3 to 4 chaldrons, an acre.

SOIL PROCESS.

Underdraining with wood, 2 to 4 feet deep, 6*d.* for a rod of 7 yards.

Paring with the breaſt plow, 10*s.* to 14*s.* an acre.

Drying and burning ſods, 5*s.* to 6*s.* an acre.

Spreading aſhes, 2*s.* an acre.

Whole expence, 18*s.* to 21*s.* an acre.

HARVEST PROCESS.

Mowing graſs, 16*d.* a day, and board; or 21*d.* to 2*s.* 3*d.* an acre.

Mowing corn, 1*s.* to 14*d.* a day, and board.

BARN LABOR.

Thraſhing wheat, 3*d*. a ſtook; or 2*s*. 6*d*. to 3*s*. a quarter.

GRASS LAND.

Gait of a cow, from Mayday to Michaelmas, 40*s*. to 45*s*.

PRO-

PROVINCIALISMS.

THE DIALECTS OF YORKSHIRE are ſtrikingly various.

The provincial language of *Cleveland* differs more widely, in ſome reſpects, from that of the *Vale of Pickering*, though ſituated only twelve or fifteen miles from each other, than the Dialect of the Vale does from that of Devonſhire, which is ſituated at an oppoſite extreme of the kingdom. The Eaſtern Morelands are a barrier which, formerly, cut off all communication between the two Diſtricts. But this cannot be the only cauſe of difference: the language and the manners, of their reſpective inhabitants, appear to have *no natural affinity:* they are, to preſent appearance, as diſtinct races of people, as if they were deſcended from different roots. The pronunciation of the Vale bears a ſtrong analogy to the *Scotch*; while that of Cleve-

land, which lies immediately between the Vale and Scotland, has little affinity to the Scotch pronunciation.

About *Leeds*, the language ſtill varies: it is there ſtrongly marked by a *twang* in the pronunciation. In the Vale of Pickering the word cow, for inſtance, takes the *cloſe* ſound "coo;" about Leeds it becomes "caw:" the *a ſhort*, as in *can*; the *w* being articulated as in the eſtabliſhed pronunciation of the word.

In the more extreme parts of *Weſt Yorkſhire*, the dialect is characterized, by an *openneſs* or *broadneſs* of pronunciation, very different from the reſt of the county. The language even of Wakefield and that of Leeds, though theſe two places are ſituated within twenty miles of each other, are, in many particulars, leſs analogous, than thoſe of Scotland and the Vale of Pickering.

The diſſimilitudes here mentioned, however, relate more to PRONUNCIATION, or what is leſs properly termed *accent*, than to WORDS. Nevertheleſs, in words, the different Diſtricts, of this extenſive province, vary conſiderably both in *identity* and *number*.

PRO-

PROVINCIAL WORDS are either *corruptions* of the eſtabliſhed language, or *native words* deſcended from the ANCIENT LANGUAGE of the province they are ſpoken in. Hence, in RECLUSE DISTRICTS, we muſt expect to find the greateſt number of *genuine provincialiſms*;—of ANCIENT VOCAL SOUNDS.

The VALE OF PICKERING is ſingularly circumſtanced in this reſpect. The peculiar recluſeneſs of its *ſituation* has been deſcribed; and being in a manner wholly agricultural, its *connexions* are inconſiderable. Had it not been for the influx of words and faſhion, which *Scarborough* has annually drawn into it, this ſecluded Vale muſt inevitably have been, in language and manners, a century at leaſt behind every other Diſtrict of *this* kingdom, ſituated equally near its center.

The MORELAND DALES, which are, in reality, appendages of the Vale, have been ſtill more effectually cut off from all *converſe with ſtrangers*. Their ſituation is ſo recluſe, their ſoil in general ſo infertile, and their aſpect ſo uninviting, that it is probable neither Roman, Dane, nor Saxon ever ſet foot in them. No wonder, then, the language of theſe Dales, which differs little from that

of the Vale,—except in its greater *purity*,—ſhould abound in *native words*; or that it ſhould vary ſo widely, in *pronunciation*, from the eſtabliſhed language of this day, as to be in a manner wholly unintelligible to ſtrangers; not, however, ſo much through *genuine words*, as through a regular SYSTEMATIC DEVIATION, from the eſtabliſhed *pronunciation* of the *Engliſh language* *.

This difference in PRONUNCIATION generally ariſes, from a *change of the vowels*; which is, in effect, productive of a *change of words*. Hence, it will be neceſſary, in giving an adequate idea of the language, to point out the *leading principles of pronunciation*: and, previous to this, it may be proper to mention a deviation in GRAMMAR; which, I be-

* It might be a difficult taſk, now, to aſcertain with preciſion, whether theſe DEVIATIONS are in reality *corruptions* or *purities* of the ENGLISH LANGUAGE. They are probably a mixture of the two; I mean, they may contain ſome ſlight admixture of depravity. But it would be equally reaſonable to ſuppoſe that a diſturbed ſtream ſhould be leſs adulterate than its fountain, as that the language at preſent eſtabliſhed ſhould be leſs *corrupt*, or (to change the word without altering the argument) leſs *refined* than that of a Diſtrict ſecluded in a ſingular manner from all intercourſe with other languages.

I believe, is peculiar to the dialect under notice.

The provincial language of East Yorkshire has no *genitive*, except that of its possessive pronouns; and except when the nominative is understood. When this is expressed, the preceding substantive becomes, in effect, an adjective; as, *John Hat,—George House*; analogous with *London porter,—Yorkshire butter*.

This excision of the genitive termination gives much additional beauty and simplicity to the language, *doing away, almost entirely, the declension of nouns*, and silencing, in some degree, the *hissing*, which is so disagreeable to the ears of foreigners, and which is one of the greatest blemishes of the English language.

A person, unacquainted with this mode of speech, will conceive it to be the cause of much ambiguity. But, among those who use it, no inconveniency whatever arises. When the nominative case is not expressed, then a genitive termination becomes requisite, and is always used; as, Whose hat is this? It is *John*'s. Whose house is this? It is *George*'s. The same in the personal pronouns:

pronouns: as, Whoſe land is this? It is *your*'s; it is *mine*; it is *his*. Even when the ſubſtantive is joined, the perſonal pronouns take a genitive form; as, *his* country, *your* country, *my* country.

The PRONUNCIATION now remains to be noticed.

The deviations lie, principally, in the *vowels*; but there is one peculiarity of ARTICULATION which is noticeable; as being a ſtranger in the eſtabliſhed pronunciation; though common, I believe, to the northern counties. This is in the articulation of the letter *t*, in *butter*, *matter*, and all words of a ſimilar termination; alſo in *tree*, *trace*, *tread*, and all words and ſyllables beginning with *tr* *.

The articulation, in theſe caſes, is between the eſtabliſhed articulation of the *t*, and that of the *th*; the tongue being preſſed hard againſt the teeth and the gums, jointly; not ſlightly touching the gums alone, as in the ordinary articulation of the *t*. I notice this as a *provincialiſm*; and know no better teſt of a *northern provincialiſt* than this peculiarity.

In

* The letter *d* takes the ſame *articulation* in ſimilar caſes; namely, whenever it is ſubjoined with *r* or *er*.

In the pronunciation of VOWELS, that of *o long*, as in *ſtone*, *yoke*, *bole*, *more*, is firſt noticeable. A mere provincialiſt of Eaſt Yorkſhire knows no ſuch ſound; nor can he, without much practice, pronounce it. In the provincial dialect it takes four diſtinct vocal ſounds; namely, *eea*, *au*, *ooa*, *a*,—according to the conſonants it is joined with in compoſition. Thus ſtone is pronounced *ſteean*; yoke, *yauk*; bole, *booal*; more, *mare*.

The diphthong *ea*, which formerly, it is probable, had a diſtinct vocal ſound aſſigned it, in the Engliſh language, but which ſeems to be, at preſent, entirely unknown to the Engliſh tongue, is ſtill in common uſe, in the dialect under notice. In the eſtabliſhed pronunciation, break is become *brake*; great, *grate*; tea, *tee*; ſea, *ſee*; but, here, they are uniformly pronounced by a vocal ſound, between the *e* and the *a* long.

The *a long* is generally, but not invariably, changed into *eea*; as, ſtake, *ſteeac*; lame, *leeam*; late, *leeat*; or into *a ſhort*, as, take, *tack*; make, *mack*.

The *e ſhort*, before *l* and *n*, is lengthened by the *y conſonant* articulated as in yet, yes, you:

you: thus, well (a fountain) becomes *weyl*; to ſell, to *ſeyl*; men, *meyn*; ten, *teyn*: in one caſe it changes into *e long*; as, well (the adverb), *weel*.

The *i long* ſeldom has the eſtabliſhed pronunciation. Before *ght* it generally changes into *e long*; as, night, *neet*; bright, *breet*; right, *reet*: before *l*, into *a broad* (as in father, half, and before the letter *r*); as, mile, *maal*; ſtile, *ſtaal*; and does not, in any caſe, take, in ſtrictneſs, the modern ſound; which is a diphthong compoſed of *a broad* and *e*: whereas its provincial ſound, here, is the *accepted* ſound of *e ſhort* lengthened by the *y conſonant* *; as, white, *wheyt*; to write, to *wreyt*: a mode of pronunciation which perhaps formerly was in general uſe, but which now ſeems to be confined to provincial dialects, or is not at leaſt heard in *faſhionable* language.

The *oo* before *k* changes into *u long*; as book, *buke*; to look, to *luke*: before *t*, *l*, *m*, *th*, generally

* I ſay, the *accepted* ſound of *e ſhort*, though it is by no means the *actual* ſound of that vowel. I have nevertheleſs thought proper to give it the eſtabliſhed power in the Gloſſary. The *i ſhort* I retain, for the ſame reaſon, though ſtill more liable to objection.

generally into *ea long*; as boots, *beats*; fool, *feal*; broom, *bream*; tooth, *teath*: before *r*, moſtly into *ee*; as floor, *fleer*; door, *deer*.

Ol before *d* generally becomes *au*; as, old, *aud*; cold, *caud*; wolds, *wauds*: in one inſtance the *l* is mute; as, hold, *hod*.

In words ending in *ault* or *alt*, the *l* is likewiſe mute, the termination becoming in both caſes *aut*; as fault, *faut*; ſalt, *ſaut*; malt, *maut* *.

The

* This brings to my mind a circumſtance which deſerves notice; as it ſerves to ſhew the *proceſs of corruption*, or as others perhaps will have it, *refinement*, of languages. There are, in many caſes, *two diſtinct provincial languages* in this Diſtrict: one of them ſpoken by the lower claſs,—more eſpecially of old people,—the other by the ſuperior claſs of *provincialiſts*. The firſt I ſhall call the *vulgar tongue* (though in all probability the purer language); the other the *middle dialect*. Thus the Engliſh word *malt* is, in the vulgar tongue *maut*, in the middle dialect *melt*: *Malton*, in like manner, becomes *Mauton* and *Molton*. All ſyllables formed with *o long* have three diſtinct pronunciations: thus *booal* in the vulgar tongue, *bali* in the middle dialect, and *bole* in the Engliſh language, convey the ſame idea. *Creeac*, *crake*, *crow*; *father* (the *a ſhort*), *faither*, *father*, are other inſtances. In a few generations, it is probable, the preſent vulgar tongue will be loſt, and the preſent middle dialect will then, of courſe, become the vulgar tongue.

The *ou* changes, almoſt invariably, into *oo*; as, flour, *floor*; our, *oor*; houſe, *hooſe*; mouſe, *mooſe*.'

The *ow* is ſubject to a ſimilar deviation; as, bowls, *bools*; power, *poor*; flower, *floor*; bow, *boo*; cow, *coo*.

Theſe are the principal part of the more REGULAR DEVIATIONS in the pronunciation of the Eaſt-Yorkſhire dialect. To go thro' its ANOMALIES would be an endleſs taſk: ſome of them will appear in the following GLOSSARY; in the forming of which, I have been induced to break through my original plan, with reſpect to PROVINCIALISMS; which was, and indeed ſtill is, to confine myſelf, merely, to ſuch words as relate more eſpecially to RURAL AFFAIRS. But finding, *in this particular inſtance*, a DECLINING LANGUAGE, which is unknown to the public *,—but which, it is highly probable, contains more ample remains of the ANCIENT LANGUAGE

* Except ſome fragments of it, which were collected on the banks of the Humber (at the moſt extreme diſtance from what may be conſidered as the ſource of the dialect) by Mr. Brokeſby, and communicated to Mr. RAY; who has preſerved them in his COLLECTION OF LOCAL WORDS.

LANGUAGE of the CENTRAL PARTS OF THIS ISLAND, than any other which is now ſpoken,—I was willing to do my beſt endeavour towards arreſting it, in its preſent form; before the general blaze of faſhion and refinement, which has already ſpread its dawn, even over this ſecluded Diſtrict, ſhall have buried it, irretrievably, in obſcurity.

PRO-

PROVINCIALISMS

OF

EAST YORKSHIRE.*

EXPLANATIONS. In this Gloſſary, *a*, before a conſonant, and without the *e final*, has the accepted power of *a ſhort*, as in man. *a*, with the *e final*, or *ai*, denotes the *Engliſh a*, or *a ſlender*, as in fate; *aa*, the *French a*, or the Engliſh *a broad*, as in half: *au*, the *Italian a*, or the Engliſh *aw*, as in law; *aw* a *ſyllable* compoſed of *a ſhort*, as in hat, and *w conſonant*, as in word.

e, the accepted power of *e ſhort*. *ea*, a *long vowel*, or *ſimple vocal ſound*, whoſe power lies between thoſe of *a ſlender* and *e long*. *ee*, the *e long*, as in feet. *eea*, a *diphthong*, or *compound vocal ſound*, compoſed of *e long* and *a ſhort*. *ey*, a *ſyllable* formed of *e ſhort*, and *y conſonant*.

o is invariably *ſhort*, as in hot. *oo* invariably *long*, as in food. *ooa*, a *compound* of *oo* and *a ſhort*.

The *i* and the *u* have their accepted powers aſſigned them; excepting the ſlight deviation in the *i long*, which has been mentioned. Where there is room for ambiguity, the quantity is ſpecified.

ABOON;

* More eſpecially of the Eaſtern Morelands and the Vale of Pickering: the Wolds, Holderneſs, and the Howardian hills, uſe the ſame dialect, but in a leſs perfect ſtate.

A.

ABOON; above, in the general ſenſe.

To ADDLE; to earn by working: "he cannot addle his bread."

ADDIWISSEN; to be ſent about addiwiſſen, is to be ſent on a fool's errand:—an expreſſion which is nearly obſolete.

AIGER; an impetuous tide. See WEST OF ENGLAND, Prov. BOAR.

AIRTH; quarter; as, "in what airth is the wind?"

AISK; *lacerta vulgaris*; the evet, or land newt.

AITHER; a plowing; as, the firſt or ſecond aither; the ſame as *airth* of ſome places, and *earth* of others.

ALLFARE; for good-and-all: "he is gone for all-fare."

AMELL; between; as, "amell ſix and ſeven o'clock."

ANANTERS, or ANTERS; leſt; or for fear; —"ananters it ſhould rain."

ANCHOR; the chape of a buckle.

ANENST, or OVER-ANENST; oppoſite.

ANGLES; the holes or runs of moles, field mice, &c.

AR; a cicatrice, or ſcar left by a wound.

ARF, or ARFISH; ſomewhat afraid.

ARK; a kind of large cheſt or bin, with diviſions within, formerly uſed for laying up dreſſed corn: a ſort of moveable granary.

ASS; aſhes.

ASS CARD; fire-ſhovel.

ASSLE; query, a corruption of *axis*, or a *native* word? *aſsle-tooth*, a grinder; *aſsle-tree*, the axis of a carriage-wheel, but of no other wheel; nor is it ever applied without the termination tree.

Perhaps *axle*, as applied to the wheel of a carriage, is a pedantic corruption of this word.

AT; who, whom, or which, in the *relative* ſenſe: it is, perhaps, a contraction of *that*: "the man at we met"—"the man at ſat next you"—"the houſe at we paſſed." See WHILK.

AVERAGE; the paſturage of common fields, and other ſtubbles, after harveſt.

AUM; elm.

AUMAS; an alms.

B.

BACKBEERAWAY; *veſpertilio*; the bat.

BACKSTON; (that is, *baking ſtone*) a ſlate, hung in an iron frame over the fire, to bake cakes upon.

BADGER; a huckſter.

BAIRN; a child.

BAIRNWORTS; *bellis perennis*; daiſies.

BALKS (pronounced *bauks*); a rough chamber in an out-building.

BAM; a joke; fun.

To BAM; to play the joke; to cajole.

BAND; a rope: hence BAND-MACKER; rope-maker.

BARFAN; a horſe-collar.

BARGUEST; a hobgoblin of the higheſt order; terrible in aſpect, and loaded with chains of tremendous rattle.

BASS; a matt of any kind.

BAT; a blow: hence

BATS; a beating: "aa'll gi' tha' thi' bats:" I'll give thee a beating.

BAUF; well grown, luſty; as a boy or youth.

To BAUTER; to trample, in a clowniſh manner; or as horſes tread down graſs, or growing corn.

BEACE; cattle; the plural of beaſt.

BEACE; a cattle ſtall.
To BEAL; to bellow, as an ox.
BECK; brook (the common term).
BEDDING; litter, of horſes or cattle.
BEELD; ſhelter; alſo the cauſe of ſhelter; a clump or ſkreen of trees, planted for the protection of ſtock, is called a beeld.
BEELDING; building; perhaps the diminutive of BEELD.
BEE-SUCKEN; applied to the aſh, when its bark is cancerous, black, and turgid.
BELIVE; (the *i long*) in the evening.
BENT; a ſpecies of ruſh which grows on the Moreland hills: *Juncus ſquarroſus.*
BESHARP; make haſte.
BINK; a bench, common at the doors of cottages; generally made of ſtones; ſometimes or of earth, and planted on the top with camomile.
BIRDSEYE; *veronica chamædrys*; germander ſpeedwell.
BISSLINGS, or BISSLING-MILK; the firſt milk of a newly calven cow.
BITER, or BILLYBITER; *motacilla atricapilla*, the blackcap.
BLACK-NEBB'D-CROW; *corvus corone*, the carrion crow.
BLAKE; yellowiſh: the color of bees-wax.
To BLASH; to ſplaſh.
BLASHY; wet, dirty, ſplaſhy; as, "blaſhy weather."
BLEA; duſky blue, or lead color.
BLEABERRY; *vaccinium myrtillus*, common whortleberry.
BLEB; a bliſter; or airbubble.
BLENDINGS; peas and beans grown together as a crop.
BLUEMILK; ſkim-milk.

BLINDERS, or BLINDING-BRIDLE (the *i* *ſhort*); blinkers for draught horſes.

BLINDMOUSE; *ſorex araneus*, the ſhrew mouſe.

BLUE-CAPS; *ſcabioſa ſucciſa*; meadow ſcabious; devil's-bit.

BLUFF; chubby; having a red, full, firm face; ſpoken of a boy or girl.

To BLUNDER; to jumble, or diſturb, ſo as to foul; as the water of a pool, or liquor which has depoſited a ſediment.

BOGGLE; an inferior hobgoblin, or any thing frightful; hence *to boggle*, as a horſe.

BOG VIOLET; *pinguicula vulgaris*; butterwort.

BONNY; pretty, handſome, beautiful.

To BOOAC; to reach, to keck.

BOOK; ſize or bulk; a word in common uſe.

BOON; going preſently; as, "he is boon to market."

BOORLY; luſty; groſs and large made, with ſome degree of comelineſs; as, a boorly man or woman.

BOTCHET; ſmall-beer mead.

BOTTRY; elder: a "bottry tree."

BOWKERS; an interjection, expreſſive of a low degree of ſurprize.

BRAKENS; *pteris aquilina*; brakes; fern.

BRANDNEW; or BRANDSPANDER NEW; fire-new,—never uſed.

BRANT; ſteep; as a hill, or a road (the common epithet).

BRASS; halfpence.

BRASHY; ſmall, rubbiſhly; as refuſe fuel.

To BRAY; to pound, or to break ſmall; as lime-ſtones for the kiln, &c.

BRECKENS. See BRAKENS.

BREEA; the brink or bank of a brook or river.

BREEKIN; the fork, or diviſion of a tree; and, figuratively, of the thighs.

BREERS; brambles and briars.

BRIDE-DOOR; "to run for the bride-door," is to ſtart for a favor, given by a bride, to be run for,

for, by the youth of the neighbourhood; who wait at the church door until the marriage ceremony be over, and from thence run to the bride's door. The prize a ribbon, which is worn, for the day, in the hat of the winner. If the diſtance be great, as two or three miles, it is cuſtomary to "ride for the bride-door."

BRIDE-WAIN; a carriage loaded with houſhold furniture and utenſils, travelling from the bride's father's to the bridegroom's houſe. Formerly, great parade and ceremony were obſerved on this occaſion. The wains were drawn entirely by oxen, whoſe horns and heads were ornamented with ribbons. Ten or perhaps twenty pair of oxen have, on great occaſions, aſſiſted in drawing a bride-wain. A young woman at her ſpinning-wheel is ſeated on the center of the load. In paſſing through towns and villages, the bride's friends and acquaintance throw up articles of furniture, until the "draught," be it ever ſo powerful, is at leaſt feigned to be over-loaded; and at length is "ſet faſt;" generally, however, by ſome artifice, rather than the weight of the loading; which, nevertheleſs, has on ſome occaſions been ſo conſiderable, as to require ſeveral wains to carry it.

BRIMMING; a ſow, when ſhe will take the boar, is ſaid to be a brimming; and the boar is ſaid to brim her.

BROCK; *cicada ſpumaria*, the cuckowſpit inſect. "He ſweats like a brock."

To BROG; to browze upon;—to crop; as cattle are wont to top underwood.

BROO; the forehead; and hence the upper part of a hill, reſembling the forehead.

BROACH; the ſpire of a church.

BUCKHEADING; cutting off live hedge-thorns, fence-height.

BUCKLE-HORNS; short crooked horns, turning horizontally inward.
BUFE; a bough of a tree.
BUFFETSTOOL; a low four-legged stool.
BULLHEAD, the fish, *cottus gobio*, the miller's thumb.
BULLS-FOREHEADS; *aira cæspitosa*; turfy air grass, or hassock grass.
BULLSPINK; the bird, *fringilla cælebs*, the chaffinch.
To BUM; to hum; as a "bumming noise"—the "bumble bee:" that is, the bumming bee.
BUMMLE-BEE; *apis terrestris*, the humble bee; properly humming bee.
BUMMLE-KITES; the fruit of the bramble; black berries.
BUN; a kecksy, or hollow stem.
To BUNCH; to kick, with the toe: hence
BUNCHCLOT; a farmer, in derision; a clod-hopper.
BURDENBAND; a hempen hay-band.
BURK; *betula alba*; the birch.
BUR-THISTLE; *carduus lanceolatus*; spear thistle.
BUSH; the box of the nave of a carriage wheel.
BUSK; a bush.
BUTTERBUMP; *ardea stellaris*, the bittern.
BUVER (the *u* long); *culex pipiens*, the common gnat, or musquito.

C.

To CADGE; to carry.
To CAKE; to cackle as geese: geese are said to cake, hens to cackle.
CALL; occasion or necessity; as "he had no call to do it."
CAM; any long mound of made earth.
CAN; a small milk-pail with a handle on the side.
To CANKER; to rust.

CANKER;

CANKER; ruſt (in common uſe).

CANKERED; cruſty; as a cur, or an ill natured huſband.

CANTY; briſk, lively, active; generally ſpoken of an old perſon.

CAPES; ears of corn, broken off, wholly or partially, in thraſhing; as well as, the grains to which the chaff adheres; (the NORF. COLDER)

CAR; low marſhy ground; fen; contradiſtinct from "Ing," as being *paſtured*.

CARBERRIES; gooſeberries; *ribes greſſularia*; properly *greſsberries*.

CARLINGS; fried peas, eaten the Sunday next but one before Eaſter; which is called "Carl-Sunday."

CATSWERRIL; *ſciurus vulgaris*, the ſquirril.

CAT-WHIN; *roſa ſpinoſiſſima*; burnet roſe.

To CAVE (vulgarly to *keeav*); to rake off or out of; as ſhort ſtraws and ears, from the corn-in-chaff, on a barn floor. Hence

CAVING RAKE; a barn-floor rake, with a ſhort head and long teeth.

CAUF; calf.

CAUMERIL; a butcher's gambrel, for ſheep and pigs; (that uſed for cattle is called a "ſtang"): "as cruked as a caumeril."

CAZZONS; the dung of cattle dried for fuel; a common article of fuel in Holderneſs.

CEILING; the wainſcotting of a room is called the "ſealin;" the ceiling, the "UNDERDRAWING."

CHAFTS; the jaws.

To CHAR; to chide; as a child, or a dog.

CHATS; keys of the aſh, and maple; alſo the catkins of the hazle.

To CHAVVLE; to chew, imperfectly. See CHAFTS.

CHEESE-CAKE-GRASS; *lotus corniculatus*; birdsfoot trefoil.

CHESLIP-SKIN; the calf's bag, uſed in making "yearning."
CHEVON; *cyprinus cephalus*; the chub.
CHIMPINGS; grits; rough-ground oatmeal.
To CHIP; to trip; as, "to chip up the heels;" or to "chip a fall;" as in wreſtling.
To CHIP; to break the ſhell, as chickens do previous to their excluſion; alſo to *chop*, as the lips.
CHIZZIL; bran (the common term).
CHOOPS; heps; the fruit of the roſe.
CHUB; a thick, clubbed piece of firewood.
CHUBBY; fat, large-headed, full-faced; as a child or young perſon.
CHUB-HEADED; large or thick-headed; ſpoken of cattle or ſheep: hence, probably, a name of the "CHEVON."
To CHUNTER; to talk about and repine at ſmall misfortunes; to expreſs diſcontent about trifles.
CICELY; *chærophyllum ſylveſtre*; orchard weed; cowparſley.
To CLAG; to cleave or cling.
CLAGGY; ſticky; as wet clay.
To CLAME (*v. n.*) to daub, as wet ſoil with the harrows.
To CLAME; (*v. a.*) to ſpread unctuous matter; as ſalve on a plaiſter, butter on bread.
To CLAPPERCLAW; to beat, or paw, with the open hand.
CLARTY; clammy, as honey, &c. ſpoken of a clayey ſoil when wet.
CLAVVER; *trifolium repens*; clover.
To CLAVVER; to clamber, as children.
CLEANING; the ſecundine of the cow, ewe, &c.
CLEG; *tabanus pluvialis*; the grey horſefly.
To CLICK; to ſnatch haſtily, or rudely.
To CLIP; to ſhear as ſheep.
CLIPPING; a ſheep-ſhearing.

To

To CLOAM, or CLAUM; to pull together with the hands and with the fingers ſpread.

CLOCKS; *ſcarabæi*; beetles of all kinds.

CLOCK-SEAVES; *ſchœnus nigricans*; black-headed bogruſh.

CLODDY; thick, ſhort, and full of fleſh; as a bullock of this deſcription.

CLOG; a log; as "a clog of wood."

CLOG-SHOES; wooden ſhoes; or rather ſhoes with wooden ſoals.

CLOSE-TEAP; a male ſheep, with both teſticles within the barrel. See HUNG TEAP.

To CLOW; to pull together, roughly with the arms; or to labor in a vulgar, furious manner.

CLUBSTER; *muſtela erminea*; the ſtoat.

To CLUNTER; to make a rude noiſe, with the feet, in walking.

To COBBLE; to ſtone; to throw ſtones, dirt, or ſnowballs.

COBBLES; pebbles; round ſtones found in the ſoil. Alſo the ſmall boats of fiſhermen.

COBBLETREES; double ſwingle-trees, whippins, or ſplinter-bars.

COBBY; merry; cheerful.

COD; pod; peaſe or beans which are well hung with pods, are ſaid to be well "codded."

COLLIER; *hirundo apus*, the black ſwallow, or ſwift.

COMMOTHER (perhaps *co-mother*); a god-mother.

CONNY; clever; neat; tidy; agreeable.

COOL, or COWL; a ſwelling raiſed on the head, by a blow from a cudgel, or other hard weapon.

COOP; an ox cart, with a *cloſe* body, and without "ſhelvings," for carrying manure, &c. ſtill in uſe.

To COOR; to crouch or ſit upon the haunches.

COOSCOT; *columba palumbus*; the wood-pigeon.

COPING (pronounced *kceapin*); the covering of a ſtone quarry.

COPPIN;

COPPIN; one ridglet of a PURL of yarn.

CORNBIND; *polygonum convolvulus*; climbing buck weed: alſo *convolvulus arvenſis*; corn convolvulus.

CLOSE (pronounced *closace*); an incloſure; in diſtinction to "field," which implies an open common field.

To COTTER; to entangle; as thread, or the hair.

COTTREL; the *key* of an iron bolt.

COUSIN BETTY; a female changeling, real or counterfeit, who goes about the country, to excite charity; as ſhe does in Devonſhire, under the ſame name.

COWCLAGS; bundles of dirt, hanging to the buttocks of cattle or ſheep; or to the coats of ſlatterns.

COWDY; pert; frolickſome.

To COWL; to gather, rake, or ſcrape together.

COWLPRESS; a lever.

COWL-RAKE; a mud ſcraper.

COW-MIG; the drainage of a cowhouſe, or dunghill.

To COWP; to change; to ſwap.

COWS-AND-CALVES; *arum maculatum*; cuckow pint.

COWSTRIPLINGS; *primula veris*; cowſlips.

COWTHERED (the TH ſoft as in *theſe*); recovered from diſeaſe or coldneſs.

COW-TIE; a ſhort thick hair rope, with a wooden nut at one end, and an eye formed in the other; for HOPPLING the hind legs of a cow, while milking.

CRAB-HULLINGS; the reſiduum in making verjuice.

To CRACK; to brag; to ſpeak highly of, or recommend ſtrongly: "the crack of the country."

CRAKE (vulg. *creak*); a crow or rook.

CRAKE-

CRAKE-FEET; *orches*; orchiſes.
CRAKE-NEEDLE; *ſcandex pecten-veneris*; ſhepherds needle.
CRAMBLES; large boughs of trees, off which the faggot wood has been cut.
CRANKY; checked linen: "cranky apron;" a checked linen apron.
To CREE; to ſeethe; to *pre-boil*, as rice, &c.
CREEL; a kind of bier, uſed for ſlaughtering and ſalving ſheep upon.
CROFT; a ſmall incloſure; larger than a yard; but ſmaller than a "CLOSE."
CROOK (pronounced *cruke*); a hook; as, a "yat-cruke;" a gate-hook.
CROUCE; pleaſed, ſatisfied, happy, in good ſpirits.
To CROWDLE (diminutive of *to crowd*); to creep cloſe together, as children round the fire, or chickens under the hen.
To CRUNKLE; to tumble or rumple, as linen or other cloaths.
CUFF OF THE NECK; the looſe ſkin, on the neck of a dog, &c. by which he is uſually held.
CUP-ROSE; *papaver*; poppy: (an apt name).
CUSHIA (the *u* long); *heracleum ſphondylium*; cowparſnep.

D.

To DAFFLE; to confuſe, or render ſtupid: it is alſo uſed in the neuter ſenſe; "he daffles," he wanders, or falters in his ſpeech or converſation. Hence,
DAFT; ſtupid, inapt; oppoſed to quick and ſenſible.
To DAG; to ſprinkle with water; as linen, &c.
DAITLE (that is *day-tale*); by the day; as "daitle-man," a day labourer; "daitle-work, work done by the day.
To DANDER; to caper; perhaps the diminutive of to dance.

DAP;

DAP; fledge, fully feathered; as young birds in the neſt.

To DARK; to liſten.

DARKENING; duſk; the cloſing in of the day.

DAU; doughy, underbaked.

To DAUL; to weary.

DAUL'D; tired; worn out with fatigue or repetition.

To DEA; to do: as, "winnot ye dea't?" will you not do it?

DEAF; blaſted, or barren; as a deaf ear of corn; or a deaf nut; namely, a nut without a kernel.

DEA-NETTLE; *galeopſis tetrahit*; wild hemp.

DEEAZ'D; killed or much injured, by cold, or a want of due warmth; as vegetables which are froſt-nipped; or chickens that die in the ſhell, through the hen's abſence.

DEED; doings: "whent deed;" great to-do.

DEFT; neat; pretty; handſome.

To DELVE; to dint or bruiſe; as a pewter or a tin veſſel.

DESS (of hay); a cut of hay.

DESSABLY; orderly.

To DESS UP; to pile up neatly.

To DIG; to break up the ground, with a hack, mattock, or other tool, which requires a ſtroke in uſing it. See To GRAVE.

DIKE; a ditch; alſo a puddle, or ſmall pool of water is a dike, or "water-dike."

To DILL; to ſoothe, blunt, or ſilence pain or ſound.

To DINDLE; to experience a ſort of tremulous ſenſation, after a blow, or after the circulation has been checked, by cold, or by what is termed *ſleep*, in the extremities. Perhaps it is diminutive of

To DITHER (the *i* *ſhort*, as in wither); to tremble, or ſhiver with cold.

To

To DOCK; to trim the buttocks, &c. of sheep.
DOCKEN; *rumex*; the dock.
DOGFINKIL; *anthemis cotula*; maithe-weed.
DONNOT (that is, *dows not*); good for nothing; bad: an epithet applied to the devil.
To DOOK; to duck or immerge in water; also to bow down the head, abruptly.
DOORY, or DEERY; very little, diminutive; "a laatle doory thing."
DORDUM; a loud, confused, riotous noise.
DORMAN; the beam of a *chamber* floor.
To DOW; to thrive or be useful; as, "he dows for nought," he is good for nothing: "he neither dees nor dows," he neither dies nor mends.
DOWLED; dead, flat; spoken of liquor which has lost its head.
DOWLEY; sickly, pale; not brisk, or florid.
DOWNDINNER; afternoon luncheon.
DOWP; *corvus cornix*; the carrion crow.
To DOVE; to doze: "a doving draft;" a narcotic.
DOZZAND; shrivelled; not plump and fair.
DRAFF; brewers grains.
DRAPE (vulgarly *dreeap*); a barren cow.
DRAUGHT; a team, either of oxen or horses.
DREE; tedious; unexpectedly long.
To DRESS (pron. *driss*); to clean, as the barn-floor or the table; also to cleanse from refuse, as corn or flour.
To DRITE; to drawl in speaking.
DROKE (pronounced *drooac*); *lolium temulentum*; darnel.
DRYSHOD; opposed to WETSHOD.
DUBBLER; a dish or platter for the table.
DUDS; cloaths; apparel.
DUMP; a deep hole of water; feigned generally to be bottomless.
DUNDER-KNOLL; a blockhead.

To

To DUZ; to beat out, as over-ripe corn at harveſt.
DWINED; ſhrivelled, as corn.

E.

EASED; dirtied; as by walking in a dirty road.
EASINS; eaves of a houſe.
EE; the eye.
EEN; eyes.
EEN; eve; (probably a contraction of *even*), as "Keſmas een," "Cannlemas een," "Faſtneſs een," "Eaſter een," "Whiſſen een."
EERAN; errand.
ELLER; *betula alnus*; alder.
ELSIN; an awl.
ENTRY; an entrance, or ſmall hall.
ESH; *fraxinus*; the aſh: probably the Saxon pronunciation.
EWER. See YEWER.
EY (the *e* ſhort and the *y* articulate); yes, aye: the affirmative anſwer, to that which is aſcertained. See WYAH and WEYEY.

F.

FAANTICKLES; freckles on the face.
To FAFF; to blow in puffs.
To FAFFLE; to play as a looſe garment in the wind.
FALLOW; ground laid down to reſt, without ſowing graſs ſeeds (as formerly practiſed). See FAUF.
FALLOW HAY; hay grown upon a fallow, or natural new ley.
To FALTER; to thraſh barley, in the chaff, in order to break off the awns.
To FASH; to teaze, and vex by importunity.
FASTNESSEEN (perhaps a corruption of *Faſt-maſs even*); Shrove Tueſday; the eve of Lent.
FAT-HEN; *chenopodium*; gooſefoot.

FAUD;

FAUD; a truſs of ſhort ſtraw, containing as much as the arms can well "faud;" that is, fold.
FAUF; a fallow, or ground repeatedly tilled, without an intervening crop. See To FELLY.
To FEAL; to hide, in the general ſenſe.
To FEED (*v. a.*); to fat cattle or ſheep. "I mean to feed her;" I intend to fat her.
To FELLY, to break up a fallow.
FEND (vulg. FEYND); activity, management, aſſiduity, proweſs.
To FEND; to ſtrive, as for a livelihood.
To FEY; to winnow with the natural wind.
To FEZZON ON; to ſeize fiercely; as the bull-dog faſtens on the baited bull.
To FICK; to ſtruggle or fight with the legs; as a cow in the "tie;" or a child in the cradle.
FIRE-EYLDING; fuel.
FITCHES; *viciæ*; vetches.
To FITTLE; to prepare, adjuſt, or make ready.
FIXFAX; the ſinews of the neck of cattle and ſheep.
To FLACK; to flicker as a bird; to throb as a wound.
FLAGS; flakes of ſnow are called "ſnaw flags."
To FLAN; to ſpread wide; as the ſides of a bowl or ſcuttle; oppoſite to upright.
To FLAY; to frighten, in the general ſenſe.
FLAYCRAKE; a ſcare crow.
FLEAKS; wattles; hurdles woven with twigs.
FLECKED; pied, as cattle.
FLIG; fledge; able to fly.
FLIPE (of a hat); the brim.
To FLIT; to move, or remove, as tenants at quarter-day.
To FLOWTER; to flurry; to confuſe, with a degree of fear.
FOALFOOT; *tuſſilago farfara*; coltsfoot.

FOG;

FOG; aftergrafs (hence perhaps *foggy*, as applied to a horfe).

FOIST; mufty.

FOLD GARTH (vulg. *faudgarth*); farm yard.

FOND; weak, filly, fooliſh, idiotic.

FOND-PLUFE: It was formerly a cuſtom, which is not I believe yet laid aſide, for the youth of each pariſh or townſhip to drag a plow from village to village, on Epiphany, or "Twelfth-day;" collecting money, to make merry with in the evening. Each party is headed by "Mab and his wife;" two young men in diſguiſe, with their faces blacked, and a kind of Harlequinean dreſs. I have met with no ſatisfactory account of the origin of this cuſtom.

FORE-ELDERS: progenitors.

FOSS; (perhaps a contraction of FORCE); a waterfall.

FOUL-MART (pron. *foomert*); *muſtela putorius*, the polecat.

FOWT; a fool.

To FOOAZ; to level, with a pair of ſhears, the top of a fleece of wool.

FOX-FINGERS; *digitalis purpurea*, the foxglove.

To FRAG; to cram, to fill inordinately; as the pockets, or as a cow's udder is ſometimes filled.

FREBBY; in proportion to, or compariſon with. "This is good, frebby that."

FREM; ſtrange, inimical, not intimate or friendly.

To FRIDGE; to chafe; to *fricare*; to wear or injure by friction.

FUDGEN: low, ſquat and inactive; oppoſed to RENKY: ſpoken chiefly of young people.

FRUGGAN; an oven poker: alſo a dirty ſlovenly woman.

GAALFAT,

G.

GAALFAT, or GUILEFAT; the vat in which new ale is set to ferment; also the liquor fermenting.

GAD;—a supple, tapering rod, six or seven feet long, with a leathern thong, about three feet long, fastened to the weaker end,—is called a gad; with which the team of oxen and horses united are, or rather were, universally driven: a fishing rod is, in like manner, called a "fishing gad."

GAIN; short, near; as, the "gaineſt way."

GAINERHAND; nearer, more convenient.

GAINHAND; near.

GAIRN; yarn.

GAIT (vulg. *geeat*); street; as west gait, castle gait *, the town gait, the gait door.

GAIT (vulg. *geeat*); a way; as "skilling gait," "goslip gait;" the names of by-ways, across common fields; also "git a gait"—go thy way.

GAIT (pron. *geeat*); a going place; as a "cow gait;" the going of a cow in a summer pasture.

GAIT (pronounced *gate*); a single sheaf of corn, bound near the top, and set upon its buts †.

GALLAC-HANDED (Q. gaelic, or gaulic, or gallic handed?) left handed.

GALLOWAY; the common name of a poney, or under-sized saddle-horse.

GAMA'SHERS; short spatterdashes, worn by plowmen.

To GAMMER; to idle.

* In towns which never were inclosed by a wall; consequently never had any *gates*. The interior streets of York, and perhaps of all old towns in the county, are called *gaits*; improperly *gates*.

† See VOL. I. page 355. Note.

GAMMERSTAGS; an idle looſe girl. See STAG.

To GANG; to go.

GANG; a ſet; as "a gang of calves-feet."

GANTRY; a beer ſtand; a frame for placing liquor caſks on.

To GAR; to make, or oblige by force; as, "I'll gar you do it."

GARFITS; garbage.

GARSIL; hedging thorns, or other bruſhwood, uſed in making dead hedges.

GARTH; a yard, or ſmall incloſure near a houſe.

To GAUV; to ſtare about, oafiſhly.

GAUVISON; an oafiſh, weak ſilly fellow.

GAY; conſiderable; middling; ordinary: "a gay book"—a tolerable ſize or bulk.

GEEAVLAC (perhaps *gavle-hack*); a large iron crow, for raiſing ſtones, &c.

GEEAVLE (in the middle dialect *gavle*); the gable, or upright end, of a roof.

GEERS; harneſs of draught horſes (the common term).

To GERN (the *g hard*, as in get); to ſnarl as a dog, or an ill-natured huſband.

GEWGAW (the *w* articulate); a Jew's harp.

GIB (the *g hard*, as in gild); a hook: a GIBBY STICK, a hooked ſtick; a NUT-GIB, a nutting hook.

GILDERS (the *g hard*); hair nooſes for catching ſmall birds.

GILL (the *g hard*); a ſmall valley; generally a branch of a valley in a mountainous country, furniſhed with a ſtream, and containing more or leſs woodineſs: a dell.

GILTS (the *g hard*); young female pigs, whether open or ſpayed; analogous with *heifers*.

GIMMER (the *g hard*); a female young ſheep; as, "gimmer lamb"—a ewe lamb—"gimmer hog"—a female ewe of the firſt year.

GLEAD;

GLEAD; *falco milvus*, the kite.
A GLIFT; a glimpſe.
To GLOOAR; to ſtare with a fixt countenance, rudely or frightfully.
GLOR-FAT; very fat: Q. from GLOR, looſe fat?
GLUT; a large wooden wedge.
GOB; a vulgar name for the mouth: hence GOB-STICK, a wooden ſpoon.
GODSPENNY; earneſt money, given on hiring a ſervant.
GODSHARLD; God forbid!
GOLDSPINK; *emberiza citrinella*; the bird, yellowhammer.
GOOAC (mid. dial. *gauk*); the core of a hay-ſtack, or of an apple.
GOODS; liveſtock.
GOSSIP; a godfather.
GOTHERLY; affable, ſociable, pleaſed with each other.
GOWLANS; the yellow flowers of the *ranunculus* tribe.
GOWPIN; as much as the two hands can hold.
GRAIN; a branch; as, a bough of a tree, or a branch of a dale; alſo the tine of a fork.
GRAITH; riches.
To GRAITHE; to make fit; to prepare; to furniſh with things ſuitable.
To GRAVE (vulg. *greeav*); to dig or break up the ground, with a *ſpade*. See To DIG.
GREASE; rancid butter, of the loweſt degree. See Vol. II. p. 203.
GREEN LINNET (in contradiſtinction to the grey linnet, or linnet); *loxia chloris*; the greenfinch.
To GREET; to weep; to cry as a child, or a perſon in grief.
GRIFF; a narrow valley, with a rocky fiſſure-like chaſm at the bottom: a dingle.
To GRIME; to ſully with ſoot or coals; in common uſe.

GRIP; a trench, or ſmall ditch.
GRIPE; a dung-fork.
GRIZELY (vulg. *graazly*); ugly in the extreme.
To GROZE; to ſave or lay up; hence
GROZER; one who keeps money or other valuables long by him. Oppoſed to a ſpendthrift.

H.

HACK; half a mattock; a mattock without the axe end: a tool much in uſe.
HAG; a coppice; originally, perhaps, the woodland ſet apart, by the lord of the ſoil, for fuel for his tenants; many woods yet retain the name of *Hags*, and one wood, in Sinnington, that of "*poor folks hags*." In the highlands of Scotland, the word is ſtill uſed in a ſimilar ſenſe.
HAGSNA'RE; a ſtool or ſtub, off which coppice wood has been cut.
HA'GWORM; the only name in uſe for *coluber berus*, the adder; which delights in a coppicewood, when recently cut: it grows, here, to a large ſize, and is extremely venomous.
HAIROUGH; *galium aperine*; cleavers.
HANDCLOUT (that is, *hand cloth*); a towel.
HANK; a with, or rope, for faſtening a gate; alſo a ſkein of yarn.
To HAP; to cover; as the ſeed with ſoil, or the body with cloaths.
A HAR; a ſtrong fog, or ſmall drizzling rain.
HARLED; mottled; as cattle.
HASK; deficient in moiſture; ſpoken more particularly of food, as bread.
HAUF; half.
HAVVER; oats.
HAY-SPADE; a ſharp, heart-ſhaped ſpade, univerſally uſed for cutting hay with.
HEAF; the haunt, walk, or habitual paſture of ſheep, on a common, or wide heath.

HEAP;

HEAP; a pottle, a quartern, a quarter of a peck.
To HEAZ; to cough or hawk; as cattle when they clear the windpipe, or force up phlegm.
HEBBLE; the rail of a wooden bridge.
HECK; a rack; as a "hay-heck;" a horſe-rack; alſo the innner or entry-door of a cottage; formerly, in all probability, made in the form of a heck.
HECKLE; the flax-dreſſer's tool.
HECKLER; a flax-dreſſer.
HEDGING MITTENS; hedging gloves.
HEEAH; here—take it.
HEEAL; whole (probably the old Britiſh word).
HELM; a hovel; or an open ſhed for cattle; ſometimes covered with faggots, and frequently with a ſtack of beans, or other corn.
HERRINSEW; *ardea cinerea*, the heron.
HEV; have.
HEYGOMAD; wild riotous tumult;—"they played heygomad."
HEYNBAUKS; hen rooſt.
HEYNCAUL; a chicken coop.
HEYNPENNY; *rhinanthus criſta-galli*; yellow rattle.
HEZ; has.
HINE (pron. *haan*); a farm bailiff, or head-man.
To HIPE; to ſtrike with the horn (Doss—Norf.)
To HIP; to ſkip, or miſs, in reading.
HIPPLES; cocklets, or ſmall bundles of hay, ſet up to dry. Vol. II. p. 135.
To HITCH; to hop, on one leg.
HOB; the ſhoe, or ſoal, of a ſledge.
HOFF; the hough, hock, gambrel, or hind knee of cattle: hence
To HOFFLE; to walk badly; not firmly; to knock the hoffs together.
HOG; a ſheep of a year old; a hoggard.
HOG PIGS; caſtrates; barrow pigs.

HOLL (pronounced *howl*); hollow; as, a "holl-way," a hollow-way: cattle when empty of meat are said to be "holl."

HOLL; a deep narrow valley is frequently termed a "holl."

HOLLIN; *Ilex*, the holly.

HOLM (pron. *howm*); a fresh-water island; a piece of land surrounded by a divaricating river or brook: hence the names of places, as *Keld-holm*, *North-holm*.

HONEY; a common word of endearment.

The HOOD; the back of the fire.

To HOPPLE; to fetter, by tying the forelegs loosely together.

HORSAM and HUNGIL-MONEY; a small tax which is still paid (though the intention of it has long since ceased) by the townships on the north side of the Vale, and within the lathe or weapontake of Pickering, for horsemen and hounds, kept for the purpose of driving off the deer of the forest of Pickering, from the corn-fields which bordered upon it. When that field of a given township which lay next the forest was fallow, no tax was due from it, that year: and though this forest has long been thrown open, or disafforested, and the common fields now inclosed, the "fauf-year" (calculating every third year) is still exempt from this *imposition*.

HORSEKNOBS; *centaurea nigra*; knobweed; knapweed.

HOST-HOUSE (pron. *west-house*); a farmer's inn at market.

HOTCH; job, or business: "thou's meead a base hotch on't."

To HOTTER; to shake, as a carriage on a rough stoney road.

HOTTERY; rough, as a road.

To

To HOVER; to ſtay; to wait for: "Will you hover till I come?"

The HOUSE; the ſitting room, or fore kitchen.

HOW; a round hillock; perhaps ſometimes a natural knoll; but generally of factitious origin. The Moreland ſwells abound with *hows*.

HOWSA'YE; an interjection, conveying a degree of exultation, after ſomething has been in doubt; as "I have done it, howſa'ye!"

To HOWZE; to lade, as water.

HOYT; a ſimpleton; a mild name for a fool.

HUBBLESHEW; a hubbub, a tumultuous aſſembly.

HUFFIL; a finger-bag.

HUFIL (the u long); the bird, *picus viridis*, woodpecker.

To HUG; to carry; eſpecially a cumbrous load.

The HUKE; the huckle, or hip.

HULET (the u long); *ſtrix*, the owl.

HUMBLED; hornleſs; ſpoken of cattle and ſheep.

HUNG-TEAP; a male ſheep, or ram. See CLOSE-TEAP.

HURN; the vacancy between the ſides of a wide cottage chimney, and the roof of the houſe.

To HURPLE; to ſtick up the back, as cattle under a hedge, in cold weather.

HYVIN; *hedera helix*; ivy.

J.

To JAUP (*v. n*); to make a noiſe like liquor agitated in a cloſe veſſel.

To JAUP (*v. a.*); to jumble; as the ſediment with the clear of bottled liquor.

JEWDICOW; *coccinella 7-punctata*, the lady-bird.

JEWEL; the ſtarling or treſtle of a wooden bridge.
ILK; each; every; as, "ilk other houſe."
ILL-TURN; miſchief, harm, or misfortune: a word in much uſe.
IMP; an eke placed under a bee hive.
The IN-EAR, or NEAR; the kidney.
ING; meadow; low mowing ground. See CAR.
INMEATS; the pluck, or edible parts, of the viſcera of animals.
INOO; preſently (perhaps a contraction of *even now*).
JUST NOO (that is, *juſt now*); immediately, inſtantly.

K.

To KEAK; to lift behind, as a vicious horſe.
To KEDGE; to gluttonize,
KEEAL, or *kale*; broth; pottage.
KEEAL POT; porridge pot.
KEEANS; ſcum, or *mother*, of ale, &c.
KELD (vulg. *keyld*); a ſpring; or perhaps a general name for a river or brook which riſes abruptly: hence the names of places; as, *keld-head*, the head of the river Coſta; *keldholm*, near the efflux of the Dove; *hell-keld-head*, the head of an emergent brook, near Kirby-moorſide.
KELK; a thump; a home blow; or a dead fall; whether by accident, or by wreſtling. See Soss.
KELTER; ſtate, condition; ſpoken of cattle, and ludicrouſly of men.
KELTER; condition. "He is in good kelter," he is in good caſe.
To KEN (vulg. to *keyn*); to know: a word in common uſe. "Do you ken him?" Do you know him.

KENSBACK;

KENSBACK ; a thing known by ſome ſtriking mark is ſaid to be a kenſback.
To KEP ; to catch ; as a ball, or as rain water from the eaves of a houſe.
KERN ; churn (probably Britiſh).
KET ; carrion ; and hence a word of reproach.
KIDS ; faggots.
KIE ; cows ; the plural of "*cee*."
KIMLIN ; a large dough tub.
KIN ; a chop in the hand, &c.
KIND ; friendly, intimate. "They are as kaand as brothers.
KINK ; a fit, or paroxiſm ; as, a "kink of laughter," a violent fit of laughter : hence
KINK-COUGH ; the hooping cough.
KIPPER ; nimble.
KIRK ; church ; ſtill pretty common in the vulgar dialect.
KIST ; cheſt.
KITE ; a vulgar name for the belly.
KITLING ; kitten, or young cat ; *Catling*.
KITTLE ; tickliſh ; ſenſible to the ſlighteſt touch; actuated by the moſt frivolous motive ; unſtable; tottering.
To KNACK ; to attempt to ſpeak the eſtabliſhed language ; or to ſpeak it affectedly.
To KNARL ; to knaw.
KNOLL ; the top, or uppermoſt ſwell, of a hill is called the knoll of the hill.

L.

LAATLE ; little.
To LABBER ; to dabble in water.
LAFTER ; the whole of the eggs, laid between two ſeparate broodings, of the hen or gooſe.
To LAIK ; to play, as children ; or at cards, or other game.

LAIROCK ;

LAIROCK; *alauda arvensis*, the sky lark.
To LAIT; to seek, in the general sense.
LANGSICKLE; a kind of wooden sopha.
LASS; the vulgar name of a maid servant.
LAT; a lath.
LAUKERINS! an expression of some little surprize, or disgust.
LAVAROCKS; (or THREE LEAVED LAVAROCKS) *oxalis acetosella*, the wood sorrel.
LEA; the common term for a sithe.
LEA SAND. See STRICKLE.
To LEAD (pronounced *leed*); to carry on a waggon, &c. as corn and hay. See WEST OF ENGLAND.
LEAD BOWLS (the *ea long*); milk leads.
LEAF; the inside fat of pigs.
LEAP; a large deep basket; a chaff basket.
To LEATHE; to relax; as a cow when near calving.
LEATHWAKE; lithe, weak, flexible, limber, feeble; as a hair, a thread, an ozier twig, or an angling rod.
LEAVE HOLD; let go.
To LEAZE; to cull, pick out, or separate, by hand; as "sleean" and "popple," from among wheat in sheaf, previously to its being thrashed for seed.
To LECK-ON; to add more water, as in brewing.
To LEEAV; to walk heavily, or with long strides; as a person walking in water; or a south country plowman on dry land.
LEEAVLANG; oblong.
To LEEM; to furnish the rock of the spinning-wheel with line; also to free nuts from their husks.
LEEVE; willingly; a word of indifference.

"A'ad

" Aa'd as leeve gang as ſtay ;" I would as ſoon go as ſtay. A word in common uſe.

LEER ; a barn (growing into diſuſe).

LEYLANDS ; lands in a common field, laid down to graſs ; oppoſed to plowlands, or ſuch as are kept under tillage.

To LIB ; to geld male lambs and calves (horſes and pigs are " *gelded*").

To LIE LEY ; to lie in graſs ; as lands in a common field. See LEYLANDS.

To LIG ; to lie along. " They lig together," they ſleep together.

To LIGHT ; to reſt, depend, or rely. " It is not to light on ;" it is not to be depended upon ; it is not ſafe to ſettle or reſt on.

LIN ; *tilia europæa*, the lime or linden tree.

LING ; *erica* ; the common name for heath.

LINTON ; the main beam of a wide cottage chimney.

LISK ; the flank of a *horſe*.

To LITE : to wait ; as, " Will you lite o' ma' ?" Will you wait for me ?

LOADSADDLE ; a wooden packſaddle.

LOBSTROUS LOUSE ; *oniſcus aſellus*, the wood louſe.

LOGGIN ; a truſs of long ſtraw.

LOOAN, or LOOANIN ; a lane.

To LOOK ; to weed ; or rather to diſweed ; as corn, or young woods.

LOOP ; the thimble of a gate or door. " Loops and crukes ;" hooks and thimbles : alſo a ſtitch in knitting.

LOP ; *pulex irritans*, the flea.

A LOW ; a flame, or blaze ; as the low of a candle.

LOWCE (that is, *looſe*) ; freed from ſervitude.

LOWND ; loo, ſtill, calm, under ſhelter ; oppoſed to windy.

To

To LOWP; to leap.

LUG; a handle or ear of a jug, &c. alſo, ludicrouſly, the ear itſelf.

LUND; a name of ſtinted common paſtures, in the Vale of York; and of one or more in the Vale of Pickering. *Q.* Analogous with HAM? See GLOCESTERSHIRE; alſo, WEST OF ENGLAND.

M.

MACK; ſort; ſpecies; as, what mack of corn, or ſtock.

To MAINSWEAR; to ſwear falſely; to commit perjury.

MAIZ; a kind of large light hay baſket.

MANG; a maſh of bran, malt, &c.

MAR; a mere, or ſmall lake.

MARK-EEN; the eve of St. Mark, when the apparitions of thoſe, who ſhall die in the enſuing year, are ſeen to walk to the church where they ſhall be buried: certain perſons "watching the kirk" to know the fate of their fellow pariſhioners. If the watcher go to ſleep, at the critical moment (the ſtroke of twelve), he himſelf is doomed to die, within the year. Theſe things are, or lately were, ſtedfaſtly believed.

MARROWS; fellows; ſpoken of oxen, &c. &c.

MASHELSON; a mixture of wheat and rye; meſlin.

MAUF; a brother-in-law.

MAUKS; maggots.

MAUL; a beetle; as, a "clodding maul;" a clotting beetle.

MAULS; *malvæ*, mallows.

MAUM; mellow, attended with a degree of dryneſs.

MAUND; a large baſket.

To

To MAUNDER, to talk, in a grumbling indiſtinct manner; as a changeling, or as a ſaucy ſervant: to mutter.

MEADOW; any ground ſhut up to be mown; in contradiſtinction to paſture.

MEALS; mold: earth; ſoil.

MEANS; property.

MEEA; the plural of more; analogous with enow; as, "*meea* meyn, and *mare* wark."

MEEALIN (mid. dial. *mailin*); an oven broom.

MELL (vulg. *meyl*); a mallet.

MELL-SUPPER, or MEYL-SUPPER; a ſupper given to farm work-people, at the cloſe of harveſt; a harveſt-home.

MENNOT; *ciprinus phoxinus*, the minnow.

MENSE; manners; creditableneſs.

MENSEFUL; mannerly, decent, neat.

MERCURY; arſenic.

MET; two buſhels.

MET POKE; a narrow corn bag, to contain two buſhels.

MEW; a mow of corn or hay.

MICKLE (vulg. tong.); much: "Is there mickle ti' dea?" Is there much to do?

MIDDEN; a dunghill.

MIDGE; *culix pulicaris*, the ſmall gnat.

MILNER; miller.

To MINT; to make a feint; to aim without intending to hit; alſo to hint, diſtantly, at ſomething deſired.

MISTEACHED (pron. *miſtecht*); ſpoiled by improper treatment; vicious, as a horſe.

MITCH (mid. dial.); much.

MITTENS; gloves with only one bag for the fingers.

MOOR-PAWMS; (that is, *Moor-Palms*); the flowers of *eriophorum*, the cotton ruſh; after which the heath-ſheep, in the ſpring, ſtray away from

from their accuſtomed "heafs:"—returning to them, when theſe flowers go off.

MOOTER; toll taken at a mill for grinding corn.

To MOOT-OUT; to break out into holes, as old clothes.

MORTAR; loamy ſoil, beaten up with water, formerly uſed in building ordinary walls; in contradiſtinction to "lime,"—"lime-and-ſand," or cement.

To MOLD (pron. *to mowd*); to ſpread molehills, &c.

MOWDHILL; molehill.

MOWDIWARP; *talpa europæa*, the mole.

MOY; muggy; alſo demure (perhaps cloſe).

MOZE; a moſs; a lake overgrown with moſs and other aquatics.

MUCK; dung, manure.

To MUCK, or to MUCK-OUT; to clear the ſtalls of cattle from dung.

MUCKMIDDEN; dunghill.

MUD SHEEP; ſheep of the old large Teeſwater breed.

MUFFS; mitts.

MUN; muſt: "Aa mun gang;" I muſt go.

MUNNOT, or MOANT; muſt not: "Thoo munnot gang;" Thou muſt not go.

To MURL (*v. a.*); to crumble, as bread.

N.

NAFF; nave of a wheel.

NAFFHEAD; blockhead; thickhead; with a head like a "naff."

To NAFFLE; to trifle; to act in a ſilly manner.

NANTPIE; *corvus pica*, the magpie.

NAPPERY WARE; crockery ware; as glaſs, china, &c.

NAT;

NAT; a ſtraw mattraſs.

NATTLES; glands, or kernels, in the fat of beef, or other butchers meat.

NEAF: the fiſt.

NEAFFUL; handful.

NEB; the beak of a bird.

NEEAH; no, to a negative queſtion aſked: "is he not come?" "neeah." Analogous with the affirmation WAAYAH.

NEEST; next: neareſt.

To NEEZE; to ſneeze (the ancient pronunciation).

To NESSLE, or NESTLE; to fidget; perhaps as unfledged neſtlings.

NIFFY NAFFY; trifling. See To NAFFLE.

NITHERED; (the *i ſhort* as in withered); periſhing with cold.

NOWTFOOT OIL; an oil extracted from the feet of cattle.

NOWT-HERD; cattle-herd, or keeper of cattle; neat-herd. Q. A corruption of *Nolt-herd?*

O.

OLD-FARRAND (vulg. *audfarrand*); old-faſhioned; ſpoken of a child, forward in ſenſe, and backward in growth.

OLD MILK; ſkim milk.

ON; uſed for *of*; as, "nowther on 'em ul teyl mah;" neither of them will tell me.

ON-STAND; the rent paid by the outgoing to the incoming tenant, for ſuch land as the former has rightfully cropped, before his leaving the farm.

ORLING; a ſtinted child; or any ill thriving young ſtock.

OSKIN; an ox-gang; a quantity, or ſhare of common field land, proportioned, perhaps, to the

the size of the fields, and the number of messuages in the given township, at the time the fields were set out, or apportioned among the houses.

To OVERGE'T (pronounced *owergit*); to overtake upon the road.

OWERGAIT; stile place, or imperfect gap, in a hedge; also a "STEPPING" place, across a brook.

OWCE; ox.

OWCEN; oxen.

OWER; over.

OWERWELT (a word difficult to define); a sheep which gets laid upon its back, in a hollow, is said to be in an *owerwelt*.

P.

PACKRAG DAY; the day after Martinmas Day; the time of changing servants.

PAIT; *ursus meles*, the badger.

PALMS (pronounced *pawms*); the male catkins of *salix caprea*, the sallow, which are worn in the hat (if the season permit) on Palm Sunday. *Palm-crosses* are also made, on that day, of the twigs of the same tree.

To PAN; to frame or proffer, as a learner: "He pans weel."

PANKIN; any small earthen jar.

PANNEL; a soft, sackweb packsaddle.

PARING-AND-BURNING; burnbeating; denshiring; sod-burning.

PARING SPADE; a breast plow.

PARZLIT O'THA'; a slight execration; curse on thee. (Q. Parz or Pars light on thee?)

PAUKY; arch; cunning; artful.

To PEFF; to cough short and faintly, as sheep.

PESSCOD SCALDING; a kind of merrymaking, in summer evenings: the treat, green field peas, boiled in the shells.

To

To PET; to indulge; to ſpoil by over-indulgence.
PET; a child ſpoilt by improper indulgence.
PET LAMB; a lamb reared by hand; a cade lamb.
To PICK; to puſh, or ſhove, with the arms or body: "He picked me down."
To PICK UP; to vomit.
PICKS; the ſuit of diamonds, in cards.
PIE; a receptacle for rape ſeed. See Vol. II. p. 38.
To PIE; to pry; to peep, ſlyly and watchfully; perhaps as the magpie.
PIGGIN; a ſmall wooden drinking veſſel; now diſuſed.
PIGLEAVES; *carduus pratenſis*; meadow thiſtle.
PIKE; a ſtacklet, or loadcock, of hay. See Vol. II. p. 134.
A PILE of GRASS; a blade of graſs.
PISSIBEDS; the only name for *leontodon taraxacum*; dandelion.
PLANE-TREE; *acer pſeudo platanus*; ſycamore.
PLOOK; a pimple.
To PLUE; to plow.
PLUFE; a plow.
PODDISH; broth; pottage.
POOAC; a narrow corn bag.
POPPLE; *agroſtemma githago*; cockle.
POST-AND-PAN. Old half-timber buildings are ſaid to be poſt-and-pan.
POT-KELPS; the looſe bow or handle of a porridge pot.
PREACE; eſtimation: ſuch a perſon or thing is in "great preace," or highly valued.
PRICKER; a brad awl.
PRICKY URCHIN; *erinaceus europæus*; the hedge hog.
PROD; a ſhort ſpike: hence
PROD; a goad for driving oxen. See GAD.
To PROD; to poke, or prick, with a prod.

To PRODDLE; to poke out, or feel for, or fetch out, with a long ſtick or other inſtrument.

PROOD TAILIER (provincial of PROUD TAYLOR); the ordinary name of *fringilla carduelis*; the goldfinch.

PUBBLE; plump, full-bodied, as corn.

PULLS; the ſhells or chaff of rape, and other pulſe.

PULSEY; a poultice.

PURE; comfortable, agreeable; as "pure warm," "pure well," &c.

PURELY; pretty well; in good health;—"How do you do?"—"Purely, thank you."

PURL; the part of a ſpinning wheel, on which the yarn is wound.

To PUZZOM; to poiſon.

Q.

QUEER; the choir of a church.

QUICKS; *triticum repens*; couch-graſs. See WHICKS.

R.

To RAIT; to diſſipate the ſap of vegetables, by expoſing them abroad to the weather. Hay is ſaid to be *raited*, when it has been much expoſed to an alternacy of wet and dry weather. See the Art. FLAX; Vol. II. p. 70.

RAITCH; a line or liſt of white, down a horſe's face.

RAM; ſmelling or taſting ſtrong; quere, as the

RAM; *alium urſinum*; ramſon.

RANK; ſtanding in cloſe order; thick upon the ground, as corn in the field, or trees in a wood.

RANNLEBAUK; a wooden bar, or balk, laid acroſs the chimney of a cottage, to hang the pothooks on.

RATTEN; *mus rattus*, &c. the rat.

REAPS;

REAPS; parcels of corn laid along upon the ſtubble, by the *reapers*, to be gathered into ſheaves, by the *binder* *.

RECKLING; the laſt of the farrow; an underling.

RECKON; pot hooks, of a particular make.

REDTAIL; *motacilla phœnicurus*; the redſtart.

REEANG'D; diſcoloured in ſtripes; liſted.

REEK; ſmoke; a word in common uſe.

RENKY; tall and athletic; ſpoken of youth; alſo of young cattle.

RESHES; *juncus inflexus*; wire ruſh. See SEAVES.

REZZLE; *muſtela vulgaris*; the weezle.

To RIE; to turn corn in a ſieve; bringing the "capes" into an eddy.

To RIFT; to eructate.

RIGG; ridge, as of land; alſo a long narrow hill.

RIGGEN; ridge of a roof.

RIGGEN TREE; a piece of timber laid along the ridge of a roof, to ſupport the heads of the ſpars: an unneceſſary piece of timber with which all old roofs are loaded.

RIGGIL, or RIG; ridgil.

To RIGHT (pron. *reet*); to comb, as the hair of the head is combed, or righted; and a comb, merely for this purpoſe, is called a "reetin keeam."

RIMS; the ſteps or ſtaves of a ladder.

To RINGE; to whine, as a dog.

RINGTAIL; *falco pygargus*; the hen-harrier.

To RIPPLE; to ſcratch, or tear, lightly; as with a pin, or a thorn: or rather, perhaps, to raiſe up and roughen the ſurface, by ſuch accident.

To ROIL; to play the male romp; ſpoken of a rude playful boy.

ROLL; a wreath, placed on the head, under the

* Hence, doubtleſs, the terms *reaping* and *reapers* of the ſouthern provinces; yet, there, the reaps are now termed ſhoves; while in the northern provinces, the act of reaping is termed SHEARING.

milking pail, &c. to keep it ſteady, and prevent its bearing partially.

ROOAC, or ROKE; a kind of ſmoke; a ſpecies of miſt, fog, or ſmall rain.

ROOP; a hoarſeneſs.

ROOTER; a kind of ruſhing noiſe; or a rough attack; as a violent guſt of wind; or a perſon ruſhing into company, abruptly, or rudely.

To ROW; to rake or ſtir about, as aſhes in an oven.

RO'WENTREE; *ſorbus aucuparia*; mountain ſorb; improperly mountain aſh.

To ROWT; to low as cattle.

ROWTY; rank; overgrown, as beans or other corn.

RUD; red ochre; uſed in giving a temporary mark to ſheep.

RUDSTAKES; ſtakes to which cattle are faſtened in the houſe.

To RUMMLE (that is, to *rumble*); to make a low rumbling noiſe, as the bull when he is agitated or diſpleaſed.

RUNNEL; a rill.

RUNSH; *ſinapis arvenſis*; wild muſtard; charlock.

RUSH (of graſs or corn); a tuft, knot, cluſter, or croud of plants: perhaps analagous with

RUSH; a meeting; a merrymaking; a rout.

RUSSELL'D; withered, as an apple.

RUSTBURN; *ononis*; reſtharrow.

S.

SAAN; ſince, when it follows the time; as, "Hoo "lang ſaan?" "A year ſaan." See SINSAAN.

SACKLESS; idiotic; ſpoken of a weak, harmleſs, inoffenſive perſon.

SAD;

SAD; heavy, applied to bread; deep or dark, applied to color.

SAIM; hog's lard.

SAL; ſhall.

To SALVE SHEEP; to dreſs them with tar and greaſe.

To SAM; to curdle milk for cheeſe, &c. "When do you ſam?" When do you ſet your milk? or, When do you make cheeſe?

SARK; ſhirt.

SAUF; *ſalix caprea*; ſallow.

SAUFY; wet, as land in a rainy ſeaſon.

SAUL; a kind of moth.

SCALDERED; chafed, bliſtered, or partially excoriated, whether by friction, heat, or corroſion: perhaps, it is diminutive of *ſcald* (leperous) as applied to the leproſy of the head, in children.

SCALDERINGS; the under-burnt cores of ſtone lime: the ſurfaces of which peeling off, in ſcales or ſhells, as thoſe of a leperous ſore.

To SCALE; to ſpread or ſcatter; as manure, gravel, or other looſe materials.

SCOW; the ſheath of a horſe.

SCAR; a precipice faced with rock.

To SCRAUT; to ſcratch, with a nail, or other ſharp-pointed tool.

SCROGS; ſtunted ſhrubs; as the hazle browzed by cattle.

To SCUD; to clean or ſcrape with a "SPITTLE."

To SCUG; to hide.

In SCUGGERY; in ſecrecy; hid, as from creditors.

SCUTTLE; a ſhallow baſket or wicker-bowl; much in uſe, here, in the barn, and in other departments of huſbandry: the larger ſizes with, the ſmaller without, handles.

SEASONSIDES; a dry, ſlow-paced, ſly fellow.

SEAVES; *juncus effuſus*; the ſoft ruſh.

SEEDGRASS; cultivated herbage; graſs raiſed from *ſeed*, in contradiſtinction from natural graſſes.

SEER; ſure, or aſſure; as, "I Aa wean't, aa ſeer tha';" I won't, I aſſure thee.

SEG, or BULLSEG; a caſtrate bull.

SEGGRUMS; *ſenecio jacobæa*; ragwort.

SEGS; *carices*; ſedges.

SEN; ſelf: "Aa'll dea't mi' ſen;" I'll do it myſelf.

To SET; to *ſee*, or accompany part of the way.

To SET AGAIT; to let looſe a horſe, &c. unintentionally. See GAIT.

SETTER; a ſeton, or iſſue in cattle.

SETTERGASS; *helleborus fœtidus*; a ſpecies of bear's foot; uſed in making "ſetters," or iſſues in cattle.

SEW; a ſow (SOWING, in like manner, is pronounced, as it is ſtill written, SEWING).

SEWER; a large ditch, or water fence; an artificial SHORE. See Vol. I. p. 181.

To SHACK (that is, to *ſhake*); to ſhed, as corn at harveſt.

SHACK-FORK (that is, *ſhake fork*); a wooden fork, for ſhaking ſtraw off the barn floor; generally made of a forked ozier; the tines or branches about two feet long, and one foot wide at the points.

SHACKLE OF THE ARM; the wriſt: hence, probably *ſhackles*; that is, irons for the ſhackles; ſhackle irons.

SHADE; a ſhed for fuel, &c.

SHAFT; handle; as "fork-ſhaft"—"ſpade-ſhaft."

SHANDY; a little crack-brained; ſomewhat crazy.

To SHEAR; to reap, or cut corn, with a ſickle, or a reaping hook.

To SHED; to part; as wool, or the hair.

SHEEP-

SHEEPCA'DE, or CADE (pron. *keead*); *acarus reduvius*; the large ſheep louſe.

SHEEPSALVE; tar-and-greaſe, for dreſſing ſheep with. See Vol. II. p. 219.

SHEEPSTA'RNEL; *ſturnus vulgaris*; the ſtarling.

SHELVINGS; moveable ſide-rails of a waggon or cart; put on for a top load, and taken off for a body load.

SHIBBANDS; ſhoe-ſtrings.

To SHILL; to ſhell; and more generally to ſeparate: taking off the ſloughs or ſkins of oats, in order to make oatmeal, is called *ſhilling* them; turning a ſmall quantity of milk into curds and whey is called *ſhilling* it; to ſever ſheep is to *ſhill* them.

SHOT-ON; rid-of: "He can't git ſhot on't:" he cannot diſpoſe or get rid of it.

To SHURL; to ſlide, as upon ice. See To SLITHER.

SIDE; long, deep; ſpoken of a roof, cloaths, &c.

To SIDELONG; to fetter, as a preventive from ſtraying, or breaking paſture; by chaining a fore and a hind foot of the ſame ſide together. See To HOPPLE.

SIDEWAVER; the purlin of a roof.

To SIE; to ſtretch; as a rope, gloves, &c.

SIKE; ſuch, in its general ſenſe.

SILE (vulg. SAAL); a milk-ſtrainer.

To SILE; to ſtrain, as freſh milk from the cow.

SILE-BRIGS; milk-ſtrainer holder; the cheeſe ladder of Gloceſterſhire, &c.

SILLS; the ſhafts of a waggon or cart.

SIN; ſince, when it precedes the time expreſſed; as, "I have not ſeen him ſin Tueſday."

To SIND; to rinſe, or waſh out; as linen, or a milking pail.

To SIPE; to ooze, or drain out ſlowly.

SINSAA'N; ſince, when ſpoken indefinitely, or when the time is underſtood; as, "I have not

seen him sinsaan;" I have not seen him since, or since that time. See SAAN and SIN.

SITTINGS; statutes for servants.

To SIZ; to hiss; as the goose, the serpent, &c.

SKELL; a large milking pail; with two handles, formed of two opposite staves, rising higher than the rest.

To SKELLER; to squint.

To SKELP; to whip the bottom, with the hand.

SKEP; a deep, round, coarse basket.

To SKERL; to scream, as a child in crying, or a woman in distress.

To SKEYL; to lean on one side: to *skeyl-up*; to throw up the fore-part of a cart, in order to shoot the load: to *skeyl-over*; to overturn.

SKEYLBEAST; the partition of cattle stalls.

SKEYLD; party-colored, as geese or ducks; shelled.

To SKIME (vulg. *skaam*); to squint.

To SKIMMER; to shine, to glitter.

To SKRAFFLE; to crawl in haste.

SKREED; a border; or narrow slip of land, or of cloth.

SKUFE; a precipice.

SKRUNSHINGS; scraps, broken meat.

SLACK; a valley, or small shallow dale; a dip; resembling the slack of a rope.

SLAPE; slippery; as ice, or a dirty path.

SLEA-WORM; the black snake (*anguis fragilis?*) from its color bearing some resemblance to that of the slea, sloe, or fruit of the black-thorn. It is not considered, here, as being very offensive.

SLED; a sledge.

SLEEAN (that is, *slain*); the smut of corn. An ear which is smutty is called a "slain ear."

To SLIPE OFF; to draw off superficially; as skin from the body, bark from a tree, &c.

To

To SLITHER (*i short*, as in hither); to slide, as down a rope, a ladder, or the side of a hill. See To SHURL.

SLOT; any broad, *flat* wooden bar; distinct from a *stower*, which is always *round*.

SLUDDER, or SLUTHER; loose, broken, slippery, pappy matter; as curds and whey, loose fat, mud, &c.

SLUSH; mud.

To SMIT; to infect (perhaps to *smite*); in common use.

SMITTING; infectious; catching, as a disease.

SMOOT; a hair muce; or any small gap or hole in the bottom of a hedge: hence,

To SMOOT; to creep under or through, as a hare or sheep through a hedge.

To SMOOTH (vulg. to *smeath*); to iron washed linen.

To SMURK; to smile; to look pleasantly.

To SNAPE; to silence, check, or at least threaten; as a barking dog, or a mischievous child.

SNECK; the latch of a door, or a gate.

SNEVVER; slender and neat.

To SNICKLE, or SNIGGLE; to snare, as hares.

SNOCKSNARLS; thread which is overtwisted, and runs into kinks, is said to run up into snocksnarls.

SNOD; smooth, even, smug, neat.

To SNOOAC; to smell in a snuffing manner, as a hound.

SOCK; the share of a plow (the common term).

SOKE (vulg. *socac*); an exclusive privilege, claimed by a mill, for grinding all the corn which is used within the manor or township it stands in *.

* Some trials at law, relative to this ancient privilege, have lately taken place; but the millers have generally been cast. It seems to be understood, however, that an *alien* miller has no right to ask, publicly, for corn to be ground, in a parish which has a corn mill belonging to it. A horn may nevertheless be sounded, or a bell be rung.

To

To SOO; to pain the hand, in ſtriking with a hammer or beetle: to *jar*.

SORT; many; "a good ſoort," a great many.

SOSS; thump, KELK: "to fall with a ſoſs;"—to fall plump; whether the weight be live or dead: KELK is applied more particularly to men and animals.

To SOSS; to lap, as a dog.

SOURDOCKEN; *rumex acetoſa*; ſorrel.

To SOWL; to pull about in water; as ſheep in the waſh-pool, &c.

SPAW; the ſlit of a pen.

To SPAWDER; to injure by forcing the legs too far aſunder; as cattle on a ſlippery road; applied equally to men and animals.

SPECK; the heel-piece of a ſhoe.

To SPEEAN (mid. dial. to *ſpane*); to wean, as calves or pigs, from the dam.

To SPEEAV (mid. dial. to *ſpave*); to ſpay; as a female calf.

SPEL (vulg. SPEYL); a bar; as "yat ſpeyl"—gate bar.

To SPELDER (vulg. to *ſpeylder*); to ſpell, as a word.

SPELK; a ſplinter, or thin piece of wood.

SPENG'D; pied, as cattle.

SPICE; dried fruit; as raiſins, currants, &c.

SPILE; the vent peg of a caſk.

SPIRES; timber ſtands (not common).

SPITTLE; a ſpaddle, or little ſpade.

SPOIL; the weaver's quill.

To SPREAD; to break hay out of ſwath: to *ted*.

To SPRENT; to ſplaſh or ſmear, with ſmall ſpots.

SPRIG; a brad.

SPRING; a young wood raiſed from the ſtools of fallen timber-trees.

SPRUNT; a ſteep road.

SQUAB; a couch, common in moſt "farm-houſes."

STACKBARS; large hurdles, with which hay ſtacks in the field are generally fenced.

STAGS;

STAGS; young horſes.
STALL; a doorleſs pew of a church.
STALLED; ſatiated with eating.
To STANG; to ſhoot with pain.
STANG; a long pole *.
STARK; ſtiff; tight; not lax: as a ſtark rope; ſtark with ſevere exerciſe.
To STAUP; to lift the feet high, and tread heavily, in walking.
STEATHING; a lath and plaiſter partition.
To STECK; to ſhut, as a door or a gate.
STEG; a gander.
STEPPED; ſomewhat beaten, as a path.
STEPPINGS, or STEPPING STONES; large ſtones, placed in the ſhallow of a brook; for foot paſſengers to ſtep over, "DRYSHOD."
STEVVON; a loud voice.
STIDDY (that is, *ſteady*); the common name of an anvil.
STIFE; ſtrong taſted; as maiz pudding, or bean cake; the latter a food formerly in uſe, here.
STOCK; liveſtock.
STOCK; the *outer* rail of a bedſtead; or the front ſide of a bed, which is placed againſt a wall.
STOOK; ſhuck; twelve ſheaves of corn, ſet up together, in the field.

* TO RIDE THE STANG. A cuſtom, which *few* men, I hope, will cenſure, has prevailed, in this country, time immemorial, and is ſtill, I find, prevalent. This cuſtom is called "riding the ſtang;" and is uſed as a reproof to the man who beats his wife; or (when it happens) to the wife who beats her huſband.

The ceremony is that of placing a man, or a boy, upon a long pole, borne on men's ſhoulders, and parading before the houſe of the delinquent; the rider repeating ſome ruſtic verſes, applicable to the occaſion. If this be found ineffectual, the ceremony is repeated, with ſtronger marks of diſapprobation. In flagrant and obſtinate caſes, the door has been aſſailed, the offender ſeized, and the puniſhment of the ducking-ſtool added to the diſgrace of the ſtang. Some inveterate caſes, it ſeems, have recently yielded to this remedy.

STOOP;

STOOP; a poſt; as, "a yat ſtoop," a gate poſt; "ſtoops and rails," poſts and rails.

STONYHARD; *lithoſpermum arvenſe*; corn gromwell.

To STOOR; to riſe up in clouds, as ſmoke, duſt, fallen lime, &c.

STORM; a fall of ſnow.

STOT; a ſteer, or young ox.

STOVEN; a ſapling ſhoot, from the ſtool of a fallen tree.

STOWER; a ſtaff, or round ſtick; as, "a heck-ſtower," a rack ſtaff.

To STRAMA'SH: to cruſh, or break irreparably; to deſtroy.

STRAND; a kennel, or occaſional rill, cauſed by falling rain; which, when heavy, "makes the "ſtrands run:" a ſpecies of SHORE (ſee Vol. I, page 181.) with which it is not analogous in this ſenſe, only, but in that of being applied to the parts of the margin of the ſea, which are waſhed by the tide.

STREEA; ſtraw.

STRICKLE; an appendage of the ſithe; the tool with which it is whetted; made, here, in a peculiar manner: a ſquare piece of wood, worked off at one end to a point; the other end forms a handle: the ſurfaces indented with the point of a ſickle; greaſed with hogſlard; and powdered with ſharp ſand, or powder of a grit-ſtone, found in one particular part of the Eaſtern Moreland; from whence it is carried, as far as the banks of the Humber, for this uſe; under the name of "LEA SAND."

To STRIP; to draw the *aftermilkings* of cows.

STRIPPINGS; *aftermilkings*; ſtrokings.

STRUM; the hoſe uſed in brewing &c. to keep the tap free.

STRUNT;

STRUNT; the dock of a horſe, independent of the hair; alſo the tail of ſlaughtered cattle or ſheep, when the ſkin is taken off.

To STUB; to grub up ſtumps of trees and ſhrubs.

STUNT; ſtubborn; not eaſy to be bent; as, a "ſtunt child," a ſtubborn child; a "ſtunt ſtick," a thick ſhort ſtick.

STUPID; obſtinate (the common epithet).

To STURKEN; to ſtiffen, as melted greaſe.

STURKS; yearling cattle.

STY; a ladder (the common term) *.

SUD; ſhould.

SUMMER COLT; when the air is ſeen in a calm hot day to undulate, near the ſurface of the ground, and appear to riſe, as from hot embers, the phænomenon is expreſſed by ſaying, "the ſummer colt rides."

To SUMMER-EAT; to uſe as paſture.

To SUNDER; to air; to expoſe to the ſun and wind; as hay which has been cocked, but which, being ſtill under dry, is reſpread abroad.

SWAD; a pod; eſpecially of peas which have been boiled in the ſhell.

SWAIMISH; baſhful, in the general ſenſe.

SWANG; any low-lying, long, graſſy place, covered, or liable to be covered, with water.

SWAPE; a long pole, turning on a fulcrum; uſed in raiſing water out of a ſhallow well.

To SWARM; to climb the naked ſtem of a tree, with the arms and knees only.

SWARTH; ſward; whether of graſs land, or of *bacon*. Hence, probably, *ſwarthy*.

To SWASH, or SWASH-OVER; to ſpill by waves; as milk or water, agitated in a pail.

* STILE is probably the diminutive of this term: the ſtile of this diſtrict is uſually formed of two ſhort ladders, meeting at the top of the fence; where they croſs each other, in the Saltier manner; the upper ends (without ſteps) ſerving as handles.

SWATCH;

SWATCH; a pattern, or ſmall ſpecimen of cloth, cut off the end of the piece; alſo a dyer's tally.

To SWATTER; to ſpill or throw about water, as geeſe and ducks do, in drinking, and feeding.

To SWAY (pronounced *ſwey*); to ride upon a plank or pole, moving on a fulcrum (as children are wont). Perhaps the beſt exemplification of the eſtabliſhed verb.

SWEAL; to waſte away, as a candle blown upon by the wind.

SWEEATH; a ſwath of mown graſs.

SWEEATH-BAUK; the ridge of ſtubble, or ſhort graſs, which is left between two ſwath-widths, in mowing.

SWEET-MART; *muſtela martes*; the marten. See FOUL-MART.

SWIDDEN; to ſinge, or burn off, as heath, &c.

To SWIDGE; to ſmart violently; as a burn, or recent wound.

SWILL; a ſort of ſhallow tub.

SWILLINGS; hogwaſh.

SWILL TUB; hog tub.

SWINE THISTLE; *ſonchus oleraceus*; ſow thiſtle.

To SWINGLE; to rough-dreſs flax.

SWINGLETREE; ſplinterbar; whippin.

SYKE; a rill or ſmall brook; more particularly, I believe, in a low boggy ſituation.

T.

To TAAL; to ſettle, or be reconciled to a ſituation; as a ſervant to a place; ſheep to a "heaf," &c.

TAISTREL; a raſcal.

TAWS; marbles; the only name.

TEA; to: as, "pud ſum mare tea't;" put ſome more to it.

TEA;

TEA; too; as, "Aa'll gang, tea;" I'll go, likewiſe.

TEAM; an ox chain, paſſing from yoke to yoke.

To TEAM; to pour, as water: alſo to unload, as hay or corn.

TEAM; empty; as, "a team waggon," an empty waggon.

TEAP; tup; a ram.

TEATHY; peeviſh; as children when cutting the teeth.

To TED. See To SPREAD.

TEEAT; the head in diſhabille; the hair in mats, or COTTERS.

To TEEAV: to paw, and ſprawl, with the arms and legs.

TEMCE; a coarſe hair ſieve, for ſeparating the inferior flour from the bran.

To TENG; to ſting; as the bee, or the adder.

TENG'D; a diſeaſe in cattle; conceived to be occaſioned by a ſmall red ſpider ſtinging the fauces, or root of the tongue. The animal voids ſaliva, ſwells, and preſently dies. An egg, broken upon the part, is *conſidered* as a remedy; if applied in time.

To TENT; to tend, as ſheep or other ſtock.

To TENT; to ſcare or frighten; as, to "tent the birds" from corn.

To TEW; to work as mortar, &c. alſo to agitate and fatigue, by violent exerciſe.

TEYLPEYAT, or TELPIE; a telltale; (perhaps as the pie, or magpie) one who divulges ſecrets; ſpoken chiefly of children.

THAAVLE; a pot-ſtick; a ladle without the bowl.

THACK; thatch.

THARFLY; ſlowly; deliberately; as, "the rain comes tharfly."

To THEAK; to thatch.

THEAKER;

THEAKER; thatcher.

THEET; close; tight; opposed to leaky.

THOU; this pronoun is still much in use. Farmers in general "thou" their servants; the inferior class (and the lower class of men in general) frequently their wives, and always their children; and the children as invariably "thou" each other. Superiors in general "thou" their inferiors; while inferiors "you" their betters. Equals and intimates of the lower class generally "thou" one another. These distinctions are sometimes the cause of aukwardness: to "you" a man may be making too familiar with him; while to "thou" him might offend him.

To THREAP; to assert, positively; to force down an argument.

THREAVE; twelve "loggins" of straw.

THREEFOLD; *menyanthes trifoliata*; bogbean.

THRONG (vulg. *thrang*); busily employed; "desperate thrang," very busy.

THROW, or THRAW; a turner's lathe.

To THRUM; to pur, as a cat.

TIFFANY; a fine gauze sieve, for separating fine flour.

To TIFT; to adjust, or dress up.

TIPE; a trap or device for catching rabbits. See Vol. II. p. 257. Also for taking mice, rats, or other vermin. The general principle is that of a balance, with one end somewhat heavier than the other. The heavier end rests horizontally on some support: the lighter is furnished with a bait; which being approached, the weight of the animal overcomes the counter weight of the balance, and drops into a pit, or a vessel of water, placed below to receive it.

TIPPY; the brim of a cap, or bonnet.

TIT, or TOMTIT; *motacilla troglodites*; the wren.

TITTER;

TITTER; ſooner; rather: "I would titter go than ſtay."—"I was there titter than you."
TIV; to: "gang tiv 'em;" go to them.
TOFFER; old furnitures, or houſehold goods.
TOIT; a miff, huff, or ſlight reſentment.
TOITY; unſteady in temper, flighty. See HOIT: hence, perhaps, *hoity-toity*.
TONGUE-WHALED; ſeverely ſcolded. See To WHALE.
To TOWP; to heel: to TOWP-OVER; to topple.
TRAMPERS; ſtrollers; whether beggars, or pedlers.
TROD; a track, or foot path; the preterite of the verb to *tread*, as road (rode) is that of the verb to *ride*.
To TROLL; to roll; as a ſtone, &c. down a ſlope. Hence,
TROLLOWERANCE; the teetotum.
TUFIT (the u long); *tringa vanellus*; the peewit, or lapwing.
To TUM; to card wool, roughly; to prepare it for the finer cards.
To TWATTLE; to pat; to make much of; as horſes, cows, dogs.
TWEEA; two, in its general ſenſe.
TWILL; a quill.
TWILT; a quilt, or bed cover.
TWITCHBELL; *forficula auricularis*; the ear-wig.
TWITTER; thread which is unevenly ſpun, is ſaid to be in twitters.

V.

VARRA; very: "varra faan;" very fine.
VOIDER; a kind of open-work, ſhallow baſket.

U.

To UNBETHINK; to recollect: I unbethought myself on't," I recollected it.

The UNDERDRAWING; the ceiling of a room. See CEILING.

UNKARD; ſtrange; as an unkard place. A ſervant is unkard on his firſt going to a freſh ſervitude.

UVVER; upper; as the uvver lip.

UZZLE, or BLACK UZZLE; *turdus merula*; the blackbird.

W.

WAD; would.

To WAFF; to bark as a cur.

WAIN; a large ox cart, with an *open* body, and furniſhed with "ſhelvings;" formerly uſed in carrying corn and hay. A hundred years ago, perhaps, there was not a farmer's WAGGON in the country: fifty years ago, WAINS were, I believe, pretty common: now, there is not, perhaps, one left.

WAINHOUSE; waggon houſes ſtill retain the ancient name.

WAKE; a company of neighbours, ſitting up all night, with the dead: a cuſtom which is ſtill prevalent.

WALKER; a fuller.

WALK MILL; a fulling mill.

WALLANEERING; an expreſſion of pity.

WALSH; inſipid; wanting ſalt, or ſome other ſeaſoning: oppoſed to reliſhing.

WANKLE; unſtable; not to be depended upon; as wankle weather, a wankle ſeat, &c.

WAR, or WARSE; worſe.

WARBLES;

WARBLES; maggots in the backs of cattle.
To WARE; to lay out; as money at a market.
To WARK; to ache: hence, "head-wark"—"teath-wark;" head-ache—tooth-ache.
WARK; work, in its general ſenſe. But what is noticeable, the verb *to work*, and the ſubſtantive *worker*, take the eſtabliſhed pronunciation.
WARK-DAY (pron. *warday*); week-day, in contradiſtinction to *Sunday*: "Sunday and war-day."
WARRIDGE; the withers of a horſe.
WATH; the common name of a ford.
WATTLES; rods laid on a roof to thatch upon.
WAVERS; young timberlings left ſtanding in a fallen wood.
To WAW (the *w* articulate); to mew as a cat.
To WAWL; to cry audibly, but not loudly.
WAZISTHEART; an expreſſion of condolence.
WEAD; very angry; mad, in the figurative ſenſe.
WEAKY; juicy; oppoſed to "HASK."
WEANT (vulg. dial.); won't, will not.
WEDGED; ſpoken of a cow's udder;—hard; ſurcharged to a degree of diſeaſe.
WEERING (that is, a *wearing*); a pulmonary conſumption.
To be WEEA; to be ſorry: "I am weea for him."
WEE-BIT; ſmall piece.
WELL (vulg. *weyl*); ſurface ſprings, uſed as a ſource of water, for domeſtic or other ſpecial purpoſes, are generally termed wells.
WETSHOD; with water in the ſhoes: "are you not wetſhod?" have not your ſhoes taken in water? is a common expreſſion.
WEYEY (the *y* articulate); yes, yes; reiterated aſſent. Perhaps a contraction of WYAH and EY.
To WHALE; to beat ſeverely, with a whip or pliant ſtick.

WHEAN ; a ſtrumpet.
WHEEANG ; a thong of leather.
WHEEANGS, or a pair of PEPPER WHEEANGS ; an old-faſhioned pepper-mill, of a moſt ſimple conſtruction.
WHENT ; great ; extraordinary : " whent deed," great doings.
WHERRY ; a liquor made from the pulp of crabs, after the verjuice is expreſſed ; generally called CRAB-WHERRY.
To WHEWT ; to whiſtle faintly, or unſkilfully.
WHICK ; alive ; quick.
WHICKS ; quicks ; *triticum repens* ; couchgraſs.
WHIE ; a heifer, or young cow.
WHIG ; acidulated whey ; ſometimes mixed with butter milk ; and with ſweet herbs, to give it flavor : formerly, perhaps, the ordinary ſummer beverage.
WHILK ; which ; as, " whilk will you have ?"—not uſed in the *relative* ſenſe. See AT.
WHIMLY ; ſoftly ; ſilently, or with little noiſe.
WHINS ; *ulex europæus* ; furz.
WHISHT ! huſh ! ſilence !
WHISHT : ſilent ; applied either to a company or to a machine, &c.
WHITE-NEBB'D CROW ; *corvus frugilegus* ; the rook.
To WHITE ; to cut or ſhape wood, with a knife.
WHITE WITCHES ; ſuperior beings in human ſhape, who formerly inhabited this quarter of the iſland ; with power (and will, when properly applied to) of counteracting the wicked intentions of the magic art. They are ſtill ſaid to inhabit the more extreme parts of the WEST OF ENGLAND ; which ſee.
WHITTLE ; a pocket knife.
WHOOR (mid. dial. WHEER) ; where : the latter is probably the *Saxon* pronunciation ; the former, perhaps, is of *Britiſh* origin.

WIDDY ;

WIDDY; a with, or withy.
WIKE; the corner of the mouth or eye.
WIKES; temporary marks; as boughs ſet up, to divide ſwaths to be mown, in the common ings; alſo boughs, ſet on haycocks, for tithes, &c. &c.
WILF; *ſalix alba*; the willow.
WINDER; window.
To WINDER; to clean corn with a fan.
WINDLESTRAWS; *cynoſurus criſtatus*; creſted dogſtail.
WINDYBAGS; a talking, rattling, noiſy fellow.
WINNOT (mid. dial.); will not.
WIZZENED; withered; ſhrivelled.
WOODWESH; *geniſta tinctoria*; dyer's broom.
WOONKERS; an interjection of ſurprize.
WOTCHAT; orchard.
WOTS; oats.
To WRAX; to ſtretch the body in yawning; or as cattle do when they riſe.
WUMMLE; an auger.
To WUN; to live, or abide; as, "he wuns at ſuch a place" (nearly obſolete).
WYAH; a word of willing aſſent, to ſomething required to be done: "Go and tell John I want him." "Wyah;" equivalent to *very well*; or to *yes I will*; or *yes*, ſimply, ſpoken with a degree of indifference. See WEYEY.

Y.

YAA; one, with the ſubſtantive expreſſed; as, "yaa man;" "yaa horſe."
YACK; oak: *yackrans*, acorns.
YAN; one, with the ſubſtantive underſtood; as, "gi' me yan:" give me one.
YANCE; once.
YAT; a gate.

YATHOUSE; a high carriage-gateway, through a building.
YAWD; a riding horſe.
YERNIN; cheeſe rennet.
YERNUTS; *bunium bulbocaſtanum*; earthnuts.
YETHERS; edders.
YETLING; an iron pan.
YEWER; the udder of a cow, &c.
YESTERNIGHT (pronounced *yiſterneet*); laſt night; analogous with yeſterday.
YOON; oven.
To YOWL, or YOOL; to howl as a dog.
YUL-CLOG; a large log, laid behind the fire, on Chriſtmas-eve; about which, formerly, much ceremony was obſerved.

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2	2	62	58	138	128	209	205	264	248	335	315
3	3	64	60	141	131	210	205	265	250	337	316
5	4	65	61	146	135	212	207	266	250	337	317
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8	6	68	64	149	139	215	210	269	253	341	320
9	8	69	65	151	141	216	211	272	256	342	321
10	9	72	68	154	144	219	213	274	257	346	324
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31	29	84	80	140	135	188	180	229	223	278	268
33	30	85	81	141	136	189	182	230	224	282	272
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